

New bids for South Bank technopark
Churchill chooses Sir Herman Bondi
Science reforms proposed by Labour
Ministers ponder OU grant

Retirement Bill will block new talent
High technology industry worried by ban on students staying on
Jesse Helms reveals all to student aide
Patent office rejects Stanford-UC gene-splicing claim

Student growth makes no sense, claims East German sociologist
Split among South African students continues to widen
Academics help Turkish return to democracy
Indian UGC recommends new promotions plan

Worldwide: Geoff Maslen reports on the financial difficulties of Australian universities, and Donald Fields reports from Helsinki on the congress of educational researchers, 8
Jon Turney discusses the latest progress in electronic publishing, 9

John Davis discusses the curious political formation of Qaddafi's Libya, 10
Peter Jackson looks at the growing crisis of the inner city, 11

Hugh Seton-Watson describes the central role of the nation in history, 12

Nigel Reeves reviews a new English version of the poems of Heinrich Heine, 14

Howard MacInn reviews a study of French communism from the Popular Front to Eurocommunism (15), Roger Vitgoe reviews a collection of K. B. McFarlane's essays on fifteenth-century England (16), and C. B. Cox discusses the creation or evolution debate (17)

Tessa Blackstone reports on the tourist delights of the American west coast; Jennie Peasey reflects on the gloomy job prospects of graduates; and Don's Diary from Rosalind Pritchard of the New University of Ulster, 22

Letters on teacher training cuts, university films, and alternatives to publishing, and 'Union View' from Arthur Houston of the Educational Institute of Scotland, 23

Next Week

Peter Keating on Robert Browning. The value of general degrees. Science and society conference with Chadwyck on cloning

THE TIMES NEWSPAPERS LIMITED, 10, Abchurch Lane, London EC4N 3DF. Telephone 01-253 3000. Printed and published by The Times Newspapers Limited, 10, Abchurch Lane, London EC4N 3DF. Telephone 01-253 3000. Registered office: 10, Abchurch Lane, London EC4N 3DF. Telephone 01-253 3000.



HIGHER EDUCATION SUPPLEMENT
Priory House, St John's Lane, London EC1M 4BX. Telephone 01-253 3000

The educational revolution and modern society IV

Towards a post-binary future

Two tentative propositions can be made about the future relationship between higher education and modern society. The first is that it is perhaps only by wholeheartedly accepting the "binary" objectives - pluralism, comprehensiveness, relevance, accountability, and social justice - that higher education, all higher education, can safeguard the presently precarious place of rationality in national life and so protect its own cognitive values. For a higher education system that stands on the social margin cannot expect to avoid making its own most intense preoccupations marginal also.

If modern society (in its double form as the creator and guarantor of free institutions through social reform and the promoter of material prosperity through effective technology) does depend on that configuration of belief and practice produced by the educational revolution, and if that revolution is now threatened with repeal because contemporary Britain is losing its once secure grip on the vocabulary of Progress and Reform, then higher education has both "public" and "private" reasons for resisting that repeal.

I have argued in previous weeks that it can only do so by the double process of reindustrialization and remoralization. A proper balance has to be kept between the well understood instrumental (high technology, skilled manpower) and fiduciary (scholarship, pedagogy) roles of universities and other higher education institutions, and their much broader intellectual, even cultural and moral, responsibilities. These arise from higher education's present position as the commanding institution within the wider intellectual system and its influence over the ideas-values that provide the raw material for the moralizing metaphors of modern society.

The second is that there is a strong and suggestive parallel between the tensions within higher education, both "public" and "private", which were described last week, and similar tensions within British society, which were hinted at in the first of these articles. Both are finding it difficult to integrate their exploding experiences. As a nation we find it more and more difficult to come to terms with the necessary sophistication of the real choices facing a modern society, while retaining a confident sense of a moral social order.

Social, or academic, morality in far too many instances has become contaminated by an anti-modernist spirit (equally among "Thatcherites" and "Berinists" in national life, and in higher education among those who argue that the appropriate strategy is a retreat into the laager of "excellence", a reversion of the disappearing dominion).

Modernism, which can be stretched to include everything from Keynesian economic management through nuclear power to the Robbins expansion of the universities or the establishment of a polytechnic alternative, is regarded more and more as an aetnaic amoral affair. Both modern society and higher education are struggling in ways that are intricately linked and with equally intricate success to establish a meta-language that moves from technical and administrative ends which can impose a moral structure on their exploding experiences.

Both propositions are of equal importance. But even if both are broadly accepted, the first is much easier to get to work on than the second. The most obvious and most hopeful strategy is to create a post-binary system of higher education in Britain. Like the original binary policy this must have two aspects: as an administrative framework for the "public" life of higher education, an affirmation of the basic ethos of limited pluralism which might still be threatened by a senseless conservative "back to Robbins" policy

of bogus integration; and as an authoritative statement or metaphor about the future direction of the system's "private" life. To do these two jobs a post-binary policy would need to fulfill two conditions. First, it must be able to reintegrate the campaign to achieve the original five "binary" objectives. Second, it must help to remove at least some of the obstacles that have grown up in the middle age of the present binary policy. And it must do both against a background of no, or at the best slow, expansion and of declining, or at the best static, public expenditure on higher education. These sombre facts, and the pervasiveness of the anti-modernist spirit of which they are clearly symptoms, make it important to go back to first principles and to try to identify those organizing principles for a post-binary policy around which higher education can regroup.

Four candidate principles can be suggested. 1. Diversity. Often an almost meaningless buzz-word, and always tricky to define. Does it mean system-wide diversity imposed from above by separation into separate sectors, or the "natural" diversity created by the free development of autonomous institutions (or, best of all, some clever marriage of the two)? However it is defined, one test of a post-binary policy will be whether it encourages the development of a much more heterogeneous system.

2. Economy. Perhaps a dirty word because of the present cuts, and potentially a confusing minefield that can protect an out-of-date hierarchy of institutions (for example, selectivity could lead to a university super-league). But, to express it in the neutral terms possible, the tension between research and teaching, the challenge to the intensely interwoven honours degree, the new enthusiasm for entrepreneurial conduct, and similar trends will inevitably and radically influence the present configuration of resources in higher education which often reflects obsolescent preoccupations.

3. Accountability/Relevance. A bogus principle, because higher education has always been accountable and relevant to somebody. Three distinct forms of accountability may emerge in the 1980s - professional accountability (sometimes slipping into a semi-syndicalist mode); political accountability, increasingly involved with quality as well as quantity; and "market" accountability, whether fuller-cost fees or the steady encroachment of the customer-contractor principle.

4. Freedom. In the 1980s the necessary conditions for free teaching and research will have to be disentangled from the decaying fragments of dominion. For there is a real danger that in the enthusiasm for the new utilitarianism, tinged by an anti-modernist spirit, these conditions may be undermined having first been discredited as an asynchronistic form of property rights. Yet because of the threatened repeal of the educational revolution, and the possible destabilization of modern society, the intellectual freedom of higher education has never been more necessary.

How such principles might be concretely applied to the building of a post-binary system can only be briefly sketched. But the best way forward would be to combine the necessary shift towards seeing higher education as a comprehensive collection of heterogeneous institutions rather than as divided into two binary camps with a move towards a much more liberal, even democratic, view of the activities in which it is appropriate for universities to engage.

One way in which this could be achieved would be to create a much more extensive "university" system of

up to a hundred institutions. Not all of these universities, however, would need to be autonomous institutions: some might be local authority institutions while several more might be direct-grant (on the pattern of the grandes écoles or Robbins' sisters?). Nor would they need to be funded in a uniform way. Under a more flexible regime of "mixed funding" they could receive money from a plurality of sources - core UGC or pool grants, earmarked or supplementary grants, and fees of all descriptions. Nor would they all need to award their own degrees.

Such an extension of the university sector and parallel expansion of the scope of the university as an institution are not perhaps as far-fetched as they appear at first sight. In Northern Ireland at this moment something very much along these lines is being attempted with Coleraine and the Ulster Polytechnic. Of course, these new-style universities would need to be complemented by the reorganization of post-18 but pre-university education in a new system of community colleges, a reorganization which in any case might be pushed along by the creation of tertiary colleges for 16 to 19-year-olds. Such colleges might in time render redundant our present obscenely significant distinctions between higher, further, and adult education.

At the same time the political structure of postsecondary education would need to be reformed. Some kind of higher education commission would become inevitable (it probably is anyway). Subordinate and specialist agencies, successors to the UGC, NAB, ABRC, and the CNA, and a proper adult education development council, could then handle the detailed jobs of quality control and resource allocation. After some years a post-binary system might emerge which was both a much more open and a much more comprehensive system than we enjoy today in Britain. While not in any way compromising either the instrumental and fiduciary roles of higher education, a post-binary system would be better able to meet broader intellectual and cultural demands, and so form the basis for a strong metaphor of remoralization.

The possible influence of such a reform of the "public life" of higher education on its intellectual contours is exaggerated. More is at stake than the institutional self-interest of higher education. Also threatened may be that configuration of belief and practice typical of modern society, and that metaphysical moral order that is a by-product of both freedom and progress.

Forty years ago W. J. Cash summed up the mentality of the American South in these words: "Proud, brave, honourable by its lights, courteous, personally generous, loyal, swift to act, but slightly ineffective, sometimes terrible in its actions - such was the South at its best." Violence, intolerance, aversion and suspicion toward new ideas, an incapacity for analysis, an inclination to act from feeling rather than from thought, an exaggerated individualism and a too narrow concept of social responsibility, attachment to and fictions and false values... sentimentality and a lack of realism - these have been its characteristic vices in the past. And, despite changes for the better, they remain its characteristic vices today.

The descent from Thomas Jefferson, through Robert E. Lee, to Huey Long may be too wayward a comparison with post-liberal post-imperial Britain for most people. But it nevertheless has an uncomfortably familiar eloquence.

Peter Scott
Laura Taylor will be back next week

brief pretentiousness in the late 1950s and early 1960s. The dismal science of economics, today's contender for hegemony, lacks a proper moral dimension. Nor does it seem very realistic to hope for a better integration between academic values and the intellectual preoccupations of lay society. The experience of the last half century has been the opposite, a growing divorce between "knowledge" in a professional academic sense and "ideas" as ingredients in public culture. No longer is "English" common territory for all those devoted to literature - few lay people bother with novels or poetry in an age of mass culture, and even if they do they still probably find the preoccupations of academic specialists strange and incomprehensible. A similar point could be made about history. Perhaps with the social sciences the gap between the academic and the practical is less, although often the fog of jargon makes it difficult to tell.

Of course, it is reactionary and unrealistic to aim to try to recreate the close, even incestuous, association between intellectual life and public culture typical of the Victorian age. The kind of social and economic reforms supported by a Macaulay helped to produce a modern society which required a specialized and sophisticated division of functions that ended by putting him out of business as an historian. Nor is it necessarily feasible to try to reestablish the intimate relationship between a pinkish intelligentsia and the reforming state of the 1940s to the 1960s, which saw its plans for modernization float gently and easily along on the post-war Bretton Woods prosperity. Yet too many people today behave as if this chain of knowledge-ideas-action did not need to be reformed for each generation and could be allowed to run away.

Some would argue that the impoverishment of public culture and the professionalization of academic knowledge are inexorable processes. Yet, under the shadow of a possible repeal of the educational revolution, that cannot be the end of the argument. For to end it there may condemn higher education, and the values it embodies, to marginality and erosion. There is already sufficient evidence of these negative currents in British society to suggest that this may not always be an exaggeration. More is at stake than the institutional self-interest of higher education. Also threatened may be that configuration of belief and practice typical of modern society, and that metaphysical moral order that is a by-product of both freedom and progress.

Forty years ago W. J. Cash summed up the mentality of the American South in these words: "Proud, brave, honourable by its lights, courteous, personally generous, loyal, swift to act, but slightly ineffective, sometimes terrible in its actions - such was the South at its best." Violence, intolerance, aversion and suspicion toward new ideas, an incapacity for analysis, an inclination to act from feeling rather than from thought, an exaggerated individualism and a too narrow concept of social responsibility, attachment to and fictions and false values... sentimentality and a lack of realism - these have been its characteristic vices in the past. And, despite changes for the better, they remain its characteristic vices today.

The descent from Thomas Jefferson, through Robert E. Lee, to Huey Long may be too wayward a comparison with post-liberal post-imperial Britain for most people. But it nevertheless has an uncomfortably familiar eloquence.

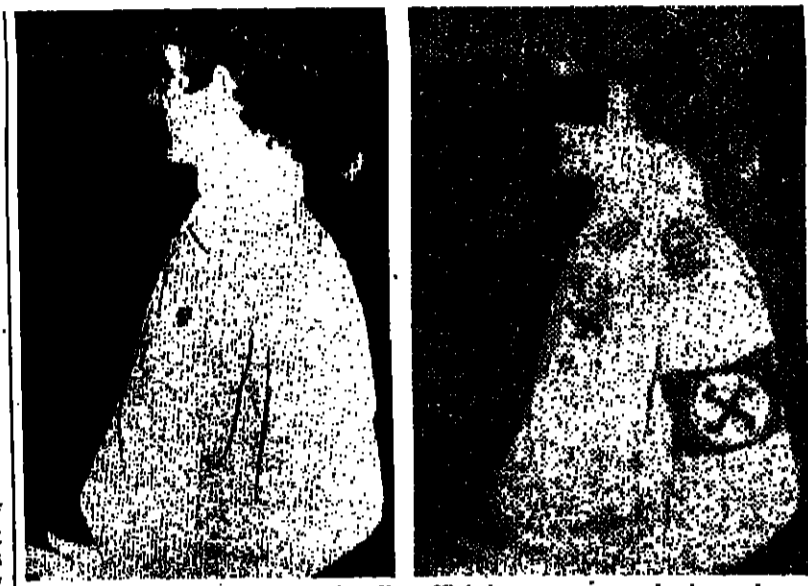
Peter Scott
Laura Taylor will be back next week

The Times Higher Education Supplement
September 3, 1982 No 513 Price 45p

Peter Keating on Browning, 12
The ethics of cloning, 11
British Leyland's Open Tech, 7
Keep degrees general, 10

OU accused of left-wing bias in social science

by Karen Gold
The Department of Education and Science has written to the Open University asking for an answer to allegations of left-wing bias in its undergraduate courses. According to the letter, past and present OU students have complained to the Department about left-wing bias in four social science courses. Education ministers, known to be no friends of the social sciences, are understood to be concerned about the political allegations and are likely to discuss the matter shortly with vice chancellor Dr John Horlock. Two of the courses named in the letter, which was sent in the middle of the summer, were in fact discarded by the OU at the end of 1981 as part of their regular updating. The other two are the social science foundation course, 'Making Sense of Society', and a more advanced course called 'People and Work'. The other two were educational studies courses, 'Contemporary Issues in Education' and the replacement social science foundation course, which began this year and is already used by 5,000 students. According to the DES, the Open University has replied to the allegations and the two parties are still discussing them. The OU vehemently denies any bias in its courses, pointing out that they receive far more intensive vetting than any other academic product, with each course being written by a team, an outside expert assessing it and monitoring by the BBC to safeguard television and radio audiences. Checks on its courses were increased in 1977, after criticism of Marxist content in some of them at that time. The number of complaints since then was very small, according to an OU spokesman. Professor Stuart Hall, professor sociology, who wrote part of the new foundation course, said he would expect a controversial subject to attract some criticism. "We are in a much more conservative time generally. If you write a new social science course in 1982 you are up for grabs," he said. "The course contrasts Marxist or radical perspectives with functionalist or pluralist ones. If you set out to contrast perspectives you have to see what Marxism or pluralism are about. Students may have misunderstood that. What I am worried about is whether the DES understands that." A DES spokesman was unable to reveal the number of letters received, who sent them and whether the writers had any political affiliations. Nor could it give the substance of the complaints or define what was meant by "left-wing".



A smear exposed: how Poland's official press retouched a photograph to make a participant in a Soviet song festival in 1973 (left) appear a neo-Nazi activist in 1982.

Students blamed for riots

Poland's military rulers are claiming that "students and hooligans", not workers, were responsible for the demonstrations held throughout Poland this week to mark the second anniversary of Solidarity. According to Warsaw television it was only in the steel town of Nowa Huta outside Krakow that demonstrations were organized without student participation. Student and intellectual opposition to military rule has recently been singled out for attack by the official propaganda. This is to reduce worker loyalty to Solidarity thus splitting the broad social basis of the movement. A Krakow University underground bulletin recently accused the official media of manipulating the Polish language to create artificial barriers between workers and intellectuals. There has been a renewed drive to pick up student and intellectual activists still in hiding. Great play has been made of the arrest on Tuesday of Dr Zbigniew Romaszewski, a physicist and Solidarity activist, who in 1980 compiled a report on human rights abuse in Poland. In Wroclaw, the local press recently carried "Wanted" notices threatening 15 years imprisonment to anyone who harboured or assisted Professor Gblichewicz, founder of the Wroclaw University Chapter.

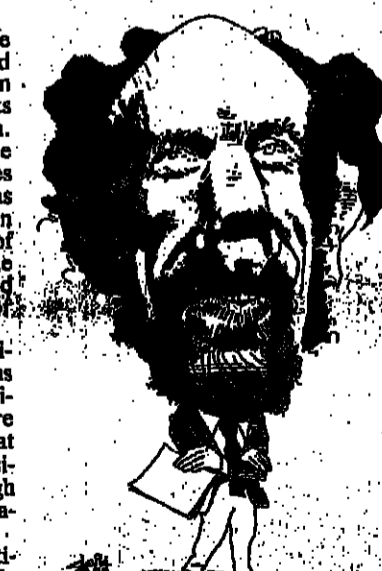
Top scorers fail to get places

by Ngajo Crequer
Fears that high quality students have been turned away from universities, and signs of higher entrance standards, were confirmed this week with the publication of official figures. As for the second year, good candidates were being turned away, the Universities Central Council on Admissions has confirmed that last year there was a "substantial increase" in the number of those with at least minimal qualifications who failed to get a place. There was a 26 per cent increase over the previous year in the total number of those who held at least two A levels. "There are appreciable increases (in rejections) even among those apparently well qualified," it said. The UCCA statistics show that there were some British students in every subject group with the highest grade (an UCCA score of 12-15, 5 for an A, 4 for a B etc.) who failed to get a place. Standards also went up, with higher grades being demanded in every subject, except for three - electrical engineering, chemistry and combined languages, where there was a small drop. A survey to be published next week, Degree Course Offers, 1982/83 by Brian Heap also examines which subjects have become more popular with students, and what range of offers were made over the last five years. This will show that, in the universities, there has been a marked rise in standards in biochemistry, building, business studies, chemistry, computer courses, civil and electrical engineering, German, law, materials, science, mathematics, medicine, physics and psychology. Once again only candidates with precisely the grades asked for can be sure of getting a place. One university professor said: "Last year there were one or two examples of this. This year every admissions tutor has lots of instances. One mathematics student who was asked for two Bs and a C but got two As and a D was rejected. A lot of candidates are falling down on their third A level." A spokesman at Hull University said that people were ringing up constantly to discover if there were any places. "The standards of rejected candidates are higher than we would have liked."

According to UCCA there was a general increase in the standard of GCE passes last year. There is also a hint that the cuts may be putting people of higher education for good. Although there was a lower proportion of home candidates admitted in 1981, there was only a surprisingly small increase in re-applications for 1982. Stalford University has for the first time published a school magazine which includes a table setting out in full details of applications, places and grades for all its courses. It hopes this will lead, it says, to a more open admissions policy and make the task of choosing a university easier. UCCA statistical supplement to the nineteenth report 1980-1, published by and obtainable from the Universities Central Council on Admissions, PO Box 28, Cheltenham, Glos GL50 1HY. Price £2.50.

Labour tempers 'cancer' smear

by Paul Flather
The Labour Party has qualified the controversial description of Oxford and Cambridge as a "major cancer in the educational system" from its draft document on post-18 education. The 71-page document passed the first of what are likely to be a series of stiff tests this week when it was approved by the party's education subcommittee, which has a number of drafting changes it now goes to the powerful home policy committee and should be published by the end of November. While the document is being criticized from outside for the enormous cost likely to follow and for a possible dilution of standards, there are criticisms from inside the party that it concentrates too much on universities and does not propose enough structural changes in higher education. The document is also being criticized because it does not specifically call for the abolition of the binary divide between universities and colleges. It says this divide will be ended gradually and proposes a joint secretariat for the National Advisory Board running the public sector and a new Open University Council replacing the University Grants Committee. One committee member said there was not enough about polytechnics and colleges. Mr Eric Robinson, director of Preston Polytechnic, also a committee member, said the changes did not go deep enough. "It's easy to be radical if you are going to spend vast sums of money,"



Phillip Whitehead defended document.

this was a common view rather than necessarily the party's. The committee felt that it confused the issue and diverted attention from the major proposal entailing everyone aged 18 and over to a year's full-time education with financial support. In fact there is a feeling that Labour has backtracked from taking a hardline on Oxbridge, for example stopping well short of quotes to force up the number of state school students admitted. It proposed the abolition of the seventh term entry which favours public school students, which would avoid a conflict of interests in taking decisions about the new institution, which is scheduled to open in two years' time. These fears were heightened by two references to the restructured university as "a spoiled child getting all the best toys". It would be given preferential treatment in the allocation of finances, said Dr Froggatt in an interview with the Belfast Telegraph, and this could mean less money for education generally in the province. Several observers have interpreted this to mean that Dr Froggatt inevitably has an interest in ensuring that the new university receives a little money, as possible. However, Dr Froggatt has denied any conflict of loyalty. In his letter Mr Birley notes that controversy now unfortunately surrounds the steering group because of Dr Froggatt's appointment. "That he should have been nominated by NUU appears to have dismayed even some people there."

Froggatt meets more criticism

by Paul McGill
Remarks made by Dr Peter Froggatt, vice-chancellor of Queen's University, Belfast, describing the new merged university in Northern Ireland as a "spoiled child" have prompted further criticism of his nomination to the steering group overseeing the amalgamation. Mr Derek Birley, rector of the Ulster Polytechnic, in a private letter to staff, has expressed surprise at the appointment of Dr Froggatt. A number of "groups" have already that Dr Froggatt would find it difficult to avoid a conflict of interests in taking decisions about the new institution, which is scheduled to open in two years' time. These fears were heightened by two references to the restructured university as "a spoiled child getting all the best toys". It would be given preferential treatment in the allocation of finances, said Dr Froggatt in an interview with the Belfast Telegraph, and this could mean less money for education generally in the province. Several observers have interpreted this to mean that Dr Froggatt inevitably has an interest in ensuring that the new university receives a little money, as possible. However, Dr Froggatt has denied any conflict of loyalty. In his letter Mr Birley notes that controversy now unfortunately surrounds the steering group because of Dr Froggatt's appointment. "That he should have been nominated by NUU appears to have dismayed even some people there."

News in brief

Microelectronics centre to open

A £1m research centre in microelectronics will be opened next month at Middlesex Polytechnic by Mr Derek Roberts, research director of GEC...

Dr John Butler, founder of the centre, said that the facilities for the design, fabrication and testing of microelectronic chips will be comparable to those in industry.

Forteen staff and ten research students will be engaged on projects including the medical uses of chips devices and improved silicon chip structures using oxygen implantation.

Double take

A Surrey student has been fined £50 and ordered to repay a £182 grant from the Manpower Services Commission after admitting that he registered at two colleges 150 miles apart.

Tower Bridge magistrates were told that he would spend one week in London, then another at Chesterfield.

Video library

The Film Library for Teacher Education is adding video to its collection of material which it supplies to colleges, departments of education and local authorities.

Wellington boost

Research engineers at Heriot-Watt University are appealing for funds to raise from the depths of Loch Ness the last surviving Wellington bomber to have seen active service.

The aircraft was in perfect condition when the university's underwater technology group discovered it in 1978, but since then its fuselage has been damaged.

America explored

More than 1,000 scholars, including some from Argentina, met at Manchester University next week to discuss the past, present, and future of the American continent.

Rome tour on

The Open University study tour of Rome for eight disabled students, which was recently threatened by the loss of its tutor, had found a replacement and sets off as planned on September 7.

Institute to help in next stage of training

The Sussex University-based Institute of Manpower Studies is to call on the education and careers service's expertise in developing the next fundamental stage of the Youth Training Scheme due to come into operation by September 1983.

The institute, which helped in the setting up of YTS through its report Foundation Training Issues, has now been commissioned by the Manpower Services Commission to undertake three further tasks.

It has until May 1983 to develop the concept of "occupational training families". This is to be done by identifying and organizing the qualities young people should possess at the

Science research 'in danger'

by Jon Turney Science Correspondent

Universities may not be able to fulfil all their research functions if pressure continues for more concentration on immediate social problems.

This danger is highlighted by Professor Geoffrey Oldham of Sussex University in a paper on The future of university research in Britain, published this week.

Oldham warns that spending cuts have severely hit scientific research in British universities.

Drawing on the work of the Leverhulme Trust's inquiry into higher education, he points out that a smaller proportion of this country's research and development takes place in universities than in other Western countries.

There are growing demands to restructure universities, with changing views of the relevance of scientific research and falling budgets which increase the need to set priorities, he says.

Hull puts tax on health and leisure

by Ngaio Crequer

Hull University is to charge students for the use of sports, health, and careers and appointments board facilities.

All full-time students will have to pay a compulsory £21 amenities fee when they register.

The students' union, which claims it was not consulted about the fee, has protested and is seeking counsel's advice to find out if it is legal.

The university estimates the fee will produce an annual income of about £100,000, compared to the £100,000 cost to run the student services.

The university said: "We introduced this fee for the first time last October, following the July letter from the University Grants Committee, when we were trying to make economies and increase our income.

"The fee substitutes a £5.50 annual health service charge. Last year £10,000 of the income went towards the day nursery and we propose to do the same in 1982/3," it added.

"Throughout the session student representatives on university union committees have expressed no opposition to the fee and it was only in July that they indicated the fee was unpopular.

"We wouldn't be able to maintain student services at the same level without additional income of this sort. We regard the levy in the same way as we do a residence fee, and we expect all students to pay it," it said.

Mr David Chew, president of the students' union, said the decision made access to education even more difficult for those who could not afford it.

"I have today written to the vice-chancellor asking him to meet me to discuss the principle of the fee. Our representatives have argued against it throughout the year, and now we are planning a campaign," he said.

"The money to the nursery is just a sop - the university should finance nursery provision anyway. We are also seeking legal opinion before we do this, and whether it is doing so sensibly." He added that staff were able to use the student facilities without paying any fee.

Science research 'in danger'

Professor Oldham reports that the Leverhulme research function seminar, which he convened, found that more time was spent preparing research proposals, the research councils were increasingly dirigiste, and morale among academics was low.

However, he emphasizes that although the inquiry brought together much new material, more work is needed to answer important questions about research before reforms are introduced.

It is not known if there has been a marked decline in research output, whether pressure for relevance has really done Government or industry any good, or how effort is distributed between different research objectives, he says.

Looking to the future, he suggests six research objectives which British universities should be able to fulfil in 20 years time.

They should contribute new knowledge and understanding; make it palatable for undergraduate teaching; provide an independent critique of society; train new

researchers; help solve immediate social problems; and contribute to a national research system.

The main difficulty will be deciding which have priority, especially while there are demands for research to produce short-term benefits.

Professor Oldham writes that there will be moral and financial pressures from society to make certain choices, but the universities should have the power and the courage to say "No" to society.

He concludes that the rationale behind change is "to ensure that those who have excelled in research in the past are provided with sufficient resources... while ensuring flexibility to encourage new initiatives and support young researchers of exceptional promise".

The future of university research in Britain (Papers in science, technology and public policy; No 2) Published by Imperial College, London and Science Policy Research Unit, Sussex.

NUS leans towards lobby idea

by David Jobbins

The National Union of Students may turn to a Washington-style lobbyist to further its interests at Westminster.

Appointment of a salaried lobbyist is one of the options being considered by NUS leaders in an attempt to increase its influence on decision-makers.

Although there are bound to be objections to the cost, it has been emphasized that the salary need not be high.

"We could employ a young whizz kid who is keen to make contacts," an official said.

The option is just one of a number of appointments the union is considering if finances recover sufficiently to take on extra staff.

Despite its supporters, it comes fairly low on a list of priorities headed by a development and training officer, a research officer for Wales, and a woman's officer.

Some of the NUS leaders are attracted by the way in which student organizations operate in the United States. An official commented: "We have been taking soundings from our colleagues on how they operate on Capitol Hill."

Despite the long timescale, it is clear NUS wants to enhance its influence not only among MPs of all parties but among officials.

Over the past year a number of MPs including Mr William van Straubenzee, Conservative MP for Woking, and Labour members Mr Jack Straw and Mr Frank Field, have advised NUS on ways of improving its lobbying tactics.

A blanket mailing to all 635 MPs has been tried for four editions but NUS leaders believe that resources would be better employed tackling particular MPs about issues which interest them - education, student welfare or international affairs.

The role of the president would remain unchanged as the public face of the NUS in contact with the media and public. But the union's concern is to make the fruits of its research available to decision-makers. Even if the lobbyist never materializes it is clear that officials will be encouraged to circulate their findings more efficiently to interested MPs.

The Department of Industry's research and development sponsorship has been reorganized to be more responsive to industrial needs.

Mr Kenneth Baker, minister of state for industry and information technology, announced on Wednesday that the five DoI research requirements boards and the Product and Process Development Scheme have been merged.

He said this would produce "an A to Z of research and development, able to give support from the early stages of industrial research and development right up to the design, development and launch of new products and processes."

The department spent over £50m on industrial research projects last year, and the money is channelled through three routes which will continue under the new Support for Innovation Scheme.

"Companies can apply for a grant covering up to one third of project costs, a shared cost contract with the Government contribution returned through sales revenue or DoI purchase of pre-production models.

NUS leans towards lobby idea

by David Jobbins

The National Union of Students may turn to a Washington-style lobbyist to further its interests at Westminster.

Appointment of a salaried lobbyist is one of the options being considered by NUS leaders in an attempt to increase its influence on decision-makers.

Although there are bound to be objections to the cost, it has been emphasized that the salary need not be high.

"We could employ a young whizz kid who is keen to make contacts," an official said.

The option is just one of a number of appointments the union is considering if finances recover sufficiently to take on extra staff.

Despite its supporters, it comes fairly low on a list of priorities headed by a development and training officer, a research officer for Wales, and a woman's officer.

Some of the NUS leaders are attracted by the way in which student organizations operate in the United States. An official commented: "We have been taking soundings from our colleagues on how they operate on Capitol Hill."

Despite the long timescale, it is clear NUS wants to enhance its influence not only among MPs of all parties but among officials.

Over the past year a number of MPs including Mr William van Straubenzee, Conservative MP for Woking, and Labour members Mr Jack Straw and Mr Frank Field, have advised NUS on ways of improving its lobbying tactics.

A blanket mailing to all 635 MPs has been tried for four editions but NUS leaders believe that resources would be better employed tackling particular MPs about issues which interest them - education, student welfare or international affairs.

The role of the president would remain unchanged as the public face of the NUS in contact with the media and public. But the union's concern is to make the fruits of its research available to decision-makers. Even if the lobbyist never materializes it is clear that officials will be encouraged to circulate their findings more efficiently to interested MPs.

The Department of Industry's research and development sponsorship has been reorganized to be more responsive to industrial needs.

Mr Kenneth Baker, minister of state for industry and information technology, announced on Wednesday that the five DoI research requirements boards and the Product and Process Development Scheme have been merged.

He said this would produce "an A to Z of research and development, able to give support from the early stages of industrial research and development right up to the design, development and launch of new products and processes."

The department spent over £50m on industrial research projects last year, and the money is channelled through three routes which will continue under the new Support for Innovation Scheme.

"Companies can apply for a grant covering up to one third of project costs, a shared cost contract with the Government contribution returned through sales revenue or DoI purchase of pre-production models.

DES stands firm on teacher deadline

by Patricia Santinelli

The Department of Education and Science has refused to extend its deadline for responses to the proposed teacher training cuts in spite of protests from institutions and maintaining bodies.

The DES argues that institutions are anxious to know the final outcome and that any extension would delay this to little purpose and possibly be detrimental to their future plans.

When the DES announced its proposed list of teacher education closures at 14 colleges and the reorganization of teacher training in England last month, it gave institutions only until September 17 to put their case for a reprieve.

This led to immediate complaints from almost all institutions not only stunned to find themselves on the list but faced with the impossible situation of getting staff, academic boards and governing bodies together during holidays in time to make a considered response.

Only last week the Association of Voluntary Colleges attacked the DES for the timing of its announcement, the lack of consultation and the short time allowed for making representations.

The National Advisory Body will receive a paper from its secretary, Mr John Brown, next week examining the broader implications of the allocation of teacher training places in the public sector. It is not bound by the September 17 deadline and will consider the individual cases next month.

Mr Bevan said this week that the DES timetable was not directly NAB's concern but he had recommended a delay in the board discussions.

The Commission for Racial Equality is also planning to take up the case of North London Polytechnic and others based in inner city areas which stand to lose their teacher education.

The breakdown of the teacher allocation in Welsh colleges, which face a minimal cut of 29 places in 1983, was announced this week. A decision on the 1984-85 allocations are being left to the Welsh Advisory Board which has been asked to report by March 31.

The allocations are: the North East Wales Institute - 65 primary and 20 secondary places, a cut of 10 places; Gwent College - 120, 70 primary and 50 secondary, an increase of five places, South Glamorgan - 114 primary and 90 secondary, growth of nine; West Glamorgan - 70 primary and 15 secondary, an increase of 15; Bangor Normal - 74 primary and 15 secondary, a cut of 16; and Trinity Camarthen, 38 primary and 15 secondary, 32 less.

Mr Michael Mallinson, the company's joint surveyor, said in a letter that the linear design would not meet the needs of the technopark. They wanted a rectangular building, and outline plans for it had already been drawn up.

"The shape must lend itself to the community we wish to create in its connexion with the polytechnic," he said. The company hoped further talks would take place once planning officers returned from holiday so a solution could be found to the deadlock.

The scheme plans to use the polytechnic's technical expertise and facilities to encourage small businesses working on the prototypes of new products, create jobs and boost the depressed local economy.

It is however in danger of being lured to another part of the county. A particularly active approach has been made by people in Birmingham offering to find a site for the project linked with Birmingham University.

In the face of this and other inquiries there have been renewed efforts to try and reach a compromise with Southwark Council.

Dr John Beishon, the South Bank director, said he had received an informal approach from the Greater London Council's industry and employment committee which wants to try and arrange a meeting with Southwark Council.

DES stands firm on teacher deadline

by Patricia Santinelli

The Department of Education and Science has refused to extend its deadline for responses to the proposed teacher training cuts in spite of protests from institutions and maintaining bodies.

The DES argues that institutions are anxious to know the final outcome and that any extension would delay this to little purpose and possibly be detrimental to their future plans.

When the DES announced its proposed list of teacher education closures at 14 colleges and the reorganization of teacher training in England last month, it gave institutions only until September 17 to put their case for a reprieve.

This led to immediate complaints from almost all institutions not only stunned to find themselves on the list but faced with the impossible situation of getting staff, academic boards and governing bodies together during holidays in time to make a considered response.

Only last week the Association of Voluntary Colleges attacked the DES for the timing of its announcement, the lack of consultation and the short time allowed for making representations.

The National Advisory Body will receive a paper from its secretary, Mr John Brown, next week examining the broader implications of the allocation of teacher training places in the public sector. It is not bound by the September 17 deadline and will consider the individual cases next month.

Mr Bevan said this week that the DES timetable was not directly NAB's concern but he had recommended a delay in the board discussions.

The Commission for Racial Equality is also planning to take up the case of North London Polytechnic and others based in inner city areas which stand to lose their teacher education.

The breakdown of the teacher allocation in Welsh colleges, which face a minimal cut of 29 places in 1983, was announced this week. A decision on the 1984-85 allocations are being left to the Welsh Advisory Board which has been asked to report by March 31.

The allocations are: the North East Wales Institute - 65 primary and 20 secondary places, a cut of 10 places; Gwent College - 120, 70 primary and 50 secondary, an increase of five places, South Glamorgan - 114 primary and 90 secondary, growth of nine; West Glamorgan - 70 primary and 15 secondary, an increase of 15; Bangor Normal - 74 primary and 15 secondary, a cut of 16; and Trinity Camarthen, 38 primary and 15 secondary, 32 less.

Mr Michael Mallinson, the company's joint surveyor, said in a letter that the linear design would not meet the needs of the technopark. They wanted a rectangular building, and outline plans for it had already been drawn up.

"The shape must lend itself to the community we wish to create in its connexion with the polytechnic," he said. The company hoped further talks would take place once planning officers returned from holiday so a solution could be found to the deadlock.

The scheme plans to use the polytechnic's technical expertise and facilities to encourage small businesses working on the prototypes of new products, create jobs and boost the depressed local economy.

It is however in danger of being lured to another part of the county. A particularly active approach has been made by people in Birmingham offering to find a site for the project linked with Birmingham University.

In the face of this and other inquiries there have been renewed efforts to try and reach a compromise with Southwark Council.

Dr John Beishon, the South Bank director, said he had received an informal approach from the Greater London Council's industry and employment committee which wants to try and arrange a meeting with Southwark Council.

Pru rejects new technopark design

by Felicity Jones

Prudential Assurance has rejected the Southwark Borough Council's alternative design for the planned Southbank Technopark.

The council put forward revised proposals for a linear-shaped building to house new high technology firms in close relation to South Bank Polytechnic. It hoped this would overcome its objections that the technopark would make use of land zoned for housing.

Prudential Assurance, which is providing the financial backing for the ambitious project, has written to the council's planning committee to say that the new proposals are unacceptable.

Mr Michael Mallinson, the company's joint surveyor, said in a letter that the linear design would not meet the needs of the technopark. They wanted a rectangular building, and outline plans for it had already been drawn up.

"The shape must lend itself to the community we wish to create in its connexion with the polytechnic," he said. The company hoped further talks would take place once planning officers returned from holiday so a solution could be found to the deadlock.

The scheme plans to use the polytechnic's technical expertise and facilities to encourage small businesses working on the prototypes of new products, create jobs and boost the depressed local economy.

It is however in danger of being lured to another part of the county. A particularly active approach has been made by people in Birmingham offering to find a site for the project linked with Birmingham University.

In the face of this and other inquiries there have been renewed efforts to try and reach a compromise with Southwark Council.

Dr John Beishon, the South Bank director, said he had received an informal approach from the Greater London Council's industry and employment committee which wants to try and arrange a meeting with Southwark Council.

The Commission for Racial Equality is also planning to take up the case of North London Polytechnic and others based in inner city areas which stand to lose their teacher education.

The breakdown of the teacher allocation in Welsh colleges, which face a minimal cut of 29 places in 1983, was announced this week. A decision on the 1984-85 allocations are being left to the Welsh Advisory Board which has been asked to report by March 31.

The allocations are: the North East Wales Institute - 65 primary and 20 secondary places, a cut of 10 places; Gwent College - 120, 70 primary and 50 secondary, an increase of five places, South Glamorgan - 114 primary and 90 secondary, growth of nine; West Glamorgan - 70 primary and 15 secondary, an increase of 15; Bangor Normal - 74 primary and 15 secondary, a cut of 16; and Trinity Camarthen, 38 primary and 15 secondary, 32 less.

Mr Michael Mallinson, the company's joint surveyor, said in a letter that the linear design would not meet the needs of the technopark. They wanted a rectangular building, and outline plans for it had already been drawn up.

"The shape must lend itself to the community we wish to create in its connexion with the polytechnic," he said. The company hoped further talks would take place once planning officers returned from holiday so a solution could be found to the deadlock.

The scheme plans to use the polytechnic's technical expertise and facilities to encourage small businesses working on the prototypes of new products, create jobs and boost the depressed local economy.

It is however in danger of being lured to another part of the county. A particularly active approach has been made by people in Birmingham offering to find a site for the project linked with Birmingham University.

In the face of this and other inquiries there have been renewed efforts to try and reach a compromise with Southwark Council.

Starstruck students need recent results

by Jon Turney Science Correspondent

Recent results from studies of the planets should be brought into undergraduate courses, according to a new report from the European Science Foundation.

The report, Planetary Science in Europe, written by scientists from six European countries, says changes in science courses are especially important in geology, physics, chemistry and astronomy, where the impact of new results is greatest.

It calls for a boost for European research in this field to match Europe's new capability in space technology.

Professor Keith Runcorn, head of the school of physics at Newcastle University, presented the report to the annual meeting of the European Geophysical Society in Leeds last week. He explained that knowledge of the planets had advanced far enough for a comparative dimension to be introduced into geology and geophysics courses.

The compilers of the report felt a coordinated European programme of planetary science and exploration was needed to guard against dominance of the field by the United States and Russia. It would also stimulate European industry and advanced technology.

Professor Runcorn said the successful development of the Ariane rocket meant the European Space Agency could launch a satellite around any of the near planets - Mercury, Mars and Venus.

This possibility, combined with Europe's good record in earth-based observation and theory, and laboratory study of meteorites and others material recovered by American missions, made the time ripe for an integrated approach to the field.

The report says the importance of the planetary sciences can be gauged from three fundamental questions. What is the origin of the solar system; why have the planets evolved in such different ways; and how do the physical and chemical processes active in the solar system work?

It stresses that the four distinct methods of investigation - space exploration, astronomy, laboratory work and theoretical studies - must be developed together.

Space missions produce spectacular results, but the other three types of investigation have advanced through refinements in technique and use of computer analysis, and will always be essential.

The report recommends that the ESA should look at more planetary missions and plan a programme for the rest of the century. This could include a lunar observatory in polar Earth orbit and the proposed Kepler mission to Mars.

To support this, it says there should be a coherent programme of earth-based observations, and theoretical studies, in leading research centres to attract good young scientists into the field.

The authors also call for promotion of scientific exchanges in Europe through travel grants and scientific meetings.

Professor Runcorn said Britain had a good record of contributions to planetary science in Europe. For example, his own laboratory had pioneered interpretation of the structure of the lunar crust. But new people must come into the field to carry on the work of the "Apollo club" - who were involved in the American moonshots.

He hoped the research councils would take note of the report and ensure the field received proper support for future development.

The report says the importance of the planetary sciences can be gauged from three fundamental questions. What is the origin of the solar system; why have the planets evolved in such different ways; and how do the physical and chemical processes active in the solar system work?

It stresses that the four distinct methods of investigation - space exploration, astronomy, laboratory work and theoretical studies - must be developed together.



Student seeks out baroque beginnings

A British student is on her way to Italy in search of old music manuscripts - a search that could throw some light on a 300 year mystery intriguing classical music specialists.

Sheffield University graduate Mandy Thomas's travels will take her by train across Europe to Bologna. From there she will journey to Forlì, Florence and Venice, in a month-long hunt for papers dating back to the 17th and 18th centuries.

The lure is the concerto grosso style of music - concerto compositions with more than one soloist. It forms an important but, she feels, overlooked part of baroque music.

Her enthusiasm for baroque earned £300, one of the Petrie Watson grants to Sheffield University arts faculty students, particularly musicians, for research or orchestra courses. It also helped her gain a Bachelor of Music degree this summer.

The search for the manuscripts, funded by the grant, will be painstaking. Most are catalogued, but they are scattered throughout the various libraries of the cities she will visit.

"It will mostly be detective work," she said. "I shall spend the month pouring over dusty library shelves. The manuscripts may have been seen before, but I don't think a study of them has been done. I haven't found any books on concerto grosso - I don't think there are any."

At the heart of her search will be questions that cause arguments among baroque specialists. What are the concerto grosso style's roots? What does it stem from? Is it from choral music (the soloists echoing the orchestral theme as in parts of a choir) or from the trio sonata, where each player had a part. Tracing the style's trends, in both time and geography, may help clear up the mystery.

Mandy will analyse the structure of the music, numbers of movements, speeds, harmonies and the virtuosity required of the violins. That will be an important clue since difficult violin parts could indicate roots in the trio sonata.

Boards merger helps industry

The Department of Industry's research and development sponsorship has been reorganized to be more responsive to industrial needs.

Mr Kenneth Baker, minister of state for industry and information technology, announced on Wednesday that the five DoI research requirements boards and the Product and Process Development Scheme have been merged.

He said this would produce "an A to Z of research and development, able to give support from the early stages of industrial research and development right up to the design, development and launch of new products and processes."

The department spent over £50m on industrial research projects last year, and the money is channelled through three routes which will continue under the new Support for Innovation Scheme.

"Companies can apply for a grant covering up to one third of project costs, a shared cost contract with the Government contribution returned through sales revenue or DoI purchase of pre-production models.

New companies trying to raise capital for high technology products can ask the department for help with technical appraisal of their proposals to financial institutions - a stage which many university-based entrepreneurs find difficult.

The DoI's main areas for promotion at present are in information technology and computers, including fibre optics, computer software, robotics, computer-aided design and manufacture and micro-electronics.



Middlesex Polytechnic went private last week. For four days a BBC film crew used the Trent Park site at Cockfosters as the setting for a public school in a forthcoming Dr Who serial "Mawdryn Undead" to be screened next February.

Conservatives launch mopping up operation

Senior Conservatives were this week attempting to restore public confidence in the party's student organization.

The standing of the Federation of Conservative Students has been severely damaged by an internal report which found current chairman, Mr Brian Monteith, guilty of "grave errors of judgement."

It also found a past chairman, Mr Peter Young, had opened a bank account in a false name to channel funds to campaigns for disaffiliation from the National Union of Students.</

Academic hiccups over drink report

by Olga Wojtas
Scottish Correspondent

An academic row has erupted over a report on drunkenness published by two sociologists at Glasgow University.

Dr Martin Plant, a research fellow in Edinburgh University's alcohol research group has condemned the paper by Dr Jason Dutton and Ms Catherine Phillips as "an extremely shoddy, slabby product". He added: "If one of my students had written it as an undergraduate essay, I wouldn't be very impressed."

Dr Dutton and Ms Phillips argue in "Drunkenness and the depression in Scotland" that too many drinking offences are being sent to prison, either directly or because they are unable to pay fines.

It is vital to have funds for a network of detoxification facilities, they say. The Government is committed to a detoxification policy by statute. But although local authorities and voluntary bodies are doing their best in this field they say: "Central Government is refusing to invest enough money on inject enough leadership."

However, Dr Plant said much of the report was unoriginal and "warming up old bread". He agreed that prison sentences were quite inappropriate, but said research in several countries had shown that detoxification centres were not an effective way of rehabilitating people.

"Dr Dutton is trying to suggest that

they're a big magic solution, and is presenting this in a naive and irrational way," he said.

He added that the report was rather similar to another produced last year by Dr Dutton on heroin abuse which was "a very unprofessional, badly researched piece of work, which was considered a bit of a joke."

Dr Dutton said he could not understand why Dr Plant was attacking his work. "He wrote an extraordinary letter to *The Scotsman* attacking the heroin report, completely inventing our arguments to be able to criticize us. I've never met him. You'd think if a colleague in another university had any doubts he would voice them to us."

The whole thing is an appalling embarrassment. I've never experienced anything like this before, and I don't really know how to respond," he said.

Dr Plant's criticisms were groundless, Dr Dutton added, but it was irritating that his comments had put a question mark against a research project which had taken over a year. Dr Plant had initially attacked the report before he had even read it, and no copy had been sent to him, he said.

"If we had to deduce his motives, we can only suppose it's academic jealousy," Dr Dutton said.

Dr Plant retorted: "This is a very strange kind of thing to say. I don't know why anybody would be jealous of the kind of research Dr Dutton is putting his pen to."

NUS leaders draw up fresh grants strategy

by David Johnson

Student leaders are drawing up a new strategy for their battle with Ministers over the increase in grants for 1983-84.

Instead of submitting a claim for a large percentage increase, they plan to couple a smaller percentage demand with a guaranteed minimum for 16-19 year-olds and a determined attempt at abolition of the parental contribution.

The new National Union of Students executive realizes that there were difficulties in mobilizing the one million membership behind last year's 17.4 per cent demand when teachers, lecturers and other public sector groups were claiming 12 per cent. This year's claim, not yet fully formalized, will be much closer to the norm for these groups in the next pay round.

NUS leaders accept that their demand for the parental contribution to be absorbed into the mandatory awards system will enable Ministers to put their plans for partial loans on the agenda. But they feel this would give them the chance to go on the offensive.

The outline of the submission was approved by the executive this week, and leaders hope details will be based on a new survey of student income and expenditure.

Last year NUS argued that grants should rise by 17.4 per cent, but was unable to deflect Ministers from holding the increase to 4 per cent and pegging the thresholds for parental contributions instead of adjusting for inflation.

The aim of the NUS survey is to identify problems students are said to be facing because the value of the grant has declined.

The last time a survey was conducted was in 1974 on data collected in 1973, and NUS believes this is far too out of date to be of value in determining grant levels for the mid-1980s.

NUS president Mr Neil Stewart

Not just feet, nits and naughty bits

Health education is not only concerned with 'feet, nits and naughty bits' according to a health education teaching pack for teenagers issued jointly by the Health Education Council and the Schools Council.

The pack stems from work carried

out by teachers in more than 70 schools and colleges. Topics range from smoking habits to dental health, from sexually transmitted diseases to nutrition and from teenage lifestyles to an explanation of National Health Service.

said: "We believe the Government has been negligent in saving in something like £60m on grants and fees without currying out any substantial research into the actual needs of students."

The possibility of Government aid for a survey was discussed by the previous NUS leadership and Mr William Waldegrave under-secretary of state for higher education earlier this year, when plans for a £100,000 survey were revived.

Department of Education officials were said to be surprised that no more was heard after NUS went away to draw up a blueprint for the survey to aid Ministers in deciding what help they could give.

NUS was ready to press ahead with a more modest survey of its own but on hearing that the door to aid was not closed, sent a copy of their survey outline to the DES this week.

Since the spring, however, relations between Ministers and the NUS have not improved.

One of Mr Stewart's first official acts was to accuse Mr Waldegrave of "misleading the public" by claiming at a Commons education select committee hearing that the basic award for 1982-83 would be "roughly comparable" with what it was 10 years ago.

In a letter to Mr Stewart Mr Waldegrave agreed the real value of the grant outside London had fallen by 6 per cent over the period, but added that the real value of the grant to students in London had actually risen by 4 per cent.

"The interpretation of these figures must of course be largely a subjective matter but I do not believe my comment... could be regarded as misleading," he wrote.

His letter also acknowledged that the 1982-83 award "may give rise to financial difficulties for some students" but made clear that no change in the overall economic situation had occurred to justify a higher level of spending on grants.

out by teachers in more than 70 schools and colleges. Topics range from smoking habits to dental health, from sexually transmitted diseases to nutrition and from teenage lifestyles to an explanation of National Health Service.



A group of scientists attending an international conference at Heriot-Watt University attempt (above) to reconstruct the "solitary wave" discovered on the Union Canal near Edinburgh by the Victorian scientist James Scott Russell, represented by a horseman in period costume.

Russell described the solitary wave or soliton as a bell-shaped wave which could transport water several miles along the canal. Solitons can now be

used to transport high speed computer data over many miles or carry biological energy to cause muscular contraction.

Over 140 physicists, engineers and applied mathematicians have been attending the SOLITONS '82 conference at Heriot-Watt to discuss this high technology research which has led to recent developments in radar, radio telescopes, meteorology and ocean waves.

In-service plans 'must match' output

by Patricia Santinelli

Government plans to control the output from initial teacher training courses would only work if in-service provision was treated in the same way.

This is the view of the Polytechnic Council for the Education of Teachers which says that a single output figure for each type of training would simplify the exercise.

"But to allow proper planning this would need to be linked with a similar target, possibly in this case, overall student numbers for in-service work. This would need to bring with it, of course, a proper costing system and resource base," the council stresses.

The council points out that the most likely device for the control of output would be the "rolling average", where over a fixed period of years an institution would be expected to closely match its annual targets. But this would be acceptable provided it applied in broad terms without precise discrimination between the BE and the Postgraduate Certificate of Education and between secondary subjects.

In particular the council is anxious to emphasize the difference in status between the BE and PGCE, with the former being a degree course in its own right as like any other.

"There is no logic which suggests that it should be more restricted in its operation than any other degree. It is difficult, however, to argue that a PGCE course is a necessary expense if the student is not required as a teacher at the end of it," the council says.

The council also sees a clear separation between academic and professional standards, the award of qualified teacher status and the Department of Education on Science output targets.

It believes academic and professional standards are strictly a matter for the institution and its validating body, and that it would be inappropriate for these to be raised or lowered arbitrarily to fit an externally imposed target.

The council points out that up to now institutions' recommendations to the DES on giving students qualified teachers status have been accepted as a mere formality.

"Therefore we would find it unacceptable if status was withheld as a device for containing student output and moreover find it difficult to see how such a system could operate," the council says.

The council is also critical of other proposals outlined in a DES consultative document "Science education in schools". It supports the aim of increasing teacher supply to achieve greater breadth and quality in science teaching, but is concerned that no thought has been given to funding.

The council is doubtful that PGCE courses in their present form can provide teachers with the recommended broad science base at either primary or secondary level.

International social workers call for political involvement

by Paul Flather

Social workers must become politically involved and must adopt radical changes in their training including courses on labour economics to face a world crisis that has undermined the ethos of social justice and left millions unemployed and in need of welfare.

That was the overriding message from the main speakers, including the president of the American Council on Social Work, at the twenty-first international congress of social work educators and trainers at Sussex University last week.

The speakers constantly referred to the current crisis in social work education, described variously as "at the crossroads", or "very tough in all our countries", or "facing a series of attacks" which had eroded the ethos of social justice, or simply with "a tremendous task ahead".

The congress, organized jointly by the International Federation of Social Workers and the International Association of Schools of Social Work, drew representatives from 60 countries, who heard 89 private papers presented. It was the first time they had met in Britain.

Dr Richard English, head of social work at Michigan University and president of the US Council on Social Work Education, called for a radical new approach to training people "in this period of grave challenges to our profession and to social welfare throughout the world".

He urged social workers to put themselves in positions of influence to cope with the great changes brought by the economic recession. "They must compete for leadership positions in society," he urged.

He said later: "Social workers must be able to influence the distribution of resources. They have to become participants in the political

process. Frankly, yes, they must become politically involved.

"We have to hope that we will train our social work students to deal with a new and different world. They must be able not only to deliver services, they must be able to fight for resources."

Dr English listed seven principles which he thought all future social work students should be familiar with, including the study of comparative value systems, the role of social work in society, international comparisons of social work provision, and the importance of research to back up claims. All are common in British courses.

But students also had to learn about fiscal accountability to cope with the new shortage of resources, and about mass communication to influence society on the importance of social work. Above all they needed to learn about labour economics.

Social workers, he said, as planners and administrators as well as practitioners, had to adjust to the fact that fewer workers are now needed. They had to study new definitions of work and welfare, new systems of distributing welfare and the impact of new technologies. Labour economics and shifts in manpower now had a central role to play.

His speech was warmly received, but a different view, particularly from third world practitioners, would place most emphasis on learning practice skills. In the third world problems are mainly food and shelter rather than care.

Miss Aida Gindy, director of Unicef in Europe, told the congress she was in developing countries was for practitioners to develop social work. She called for a more positive research contribution from social work schools.

British lessons for America

The current debate in Britain over the need for more specialist training for all social workers, could provide useful insights for American workers, the congress was told in one of its 89 specialist seminars.

Dr Merl Hokenstad, from Case Western University in Ohio, in a comparative study of social work education in Britain and the US, said Americans could learn from the team approach being favoured in Britain.

In American graduate level social work teaching had in recent years moved towards the principle of increased specialization. All study programmes had to concentrate on practice, population groups, or problem areas, he said.

In Britain there is a fierce debate on the subject, with social work schools largely favouring the general approach, while practitioners and administrators worried about the deficiencies in the delivery of service this can cause. They are more inclined towards specialization.

Mr John Cypher, general secretary of the British Association of Social Workers for example, favoured more

specialization, particularly for work with the elderly, and the physically and mentally handicapped. Most specialization so far has been concerned with children in care.

On the other side there is a fear that specialization could reinforce fragmentation in the service. Dr Hokenstad said the answer might lie in the British "generic team" approach, each containing a range of specialists.

He said Americans could also learn from the new patch system being developed in Britain involving a small team of social workers who concentrate on the community in a given area building close personal links. This deserved consideration in the US especially in low income inner city areas or deprived rural areas, and involving the training of generalists into specialists.

Americans could also learn from the post-qualifying in-service courses and on-the-job probationary courses, being studied in Britain as alternatives to expensive and general courses.

North American news

Civil rights court action fails

from Peter David

WASHINGTON
A veteran civil rights group last week failed in a bid to prevent the Reagan administration from softening federal policy on desegregation of higher education in the southern states.

The National Association for the Advancement of Coloured People's legal defence fund had gone to court in an attempt to overturn a year-old decision by the department of education to approve a scheme for desegregation of North Carolina's universities.

The legal fund believes the scheme, drawn up in secret negotiations between federal and state officials does not go far enough to eradicate vestiges of the segregated higher education system operated by North Carolina before the 1954 Supreme Court ruling which outlawed separate education for blacks and whites.

But a Federal Appeals Court in Washington ruled that it had no jurisdiction in the case following approval of the scheme by a North Carolina district court last summer. A majority opinion said: "The day has not yet come when courts of our circuit should issue declaratory judgments evaluating actions taken by courts of another circuit."

The case had taken on national significance because the North Caro-

lina agreement was hailed by the Reagan administration as a model of the kind of desegregation agreement which could be achieved without legal coercion by the federal government.

A total of 19 southern states operated segregated university systems prior to 1954. For 12 years progress towards desegregation has depended largely on legal action by civil rights groups and the threat of financial sanctions by the department of education.

The Reagan administration, however, made it clear soon after the 1981 election that it hoped to proceed towards desegregation on the basis of voluntary agreements in which the southern states would be given maximum latitude.

In talks with the new administration North Carolina promised to spend more money on its five traditionally black colleges and launch 29 "high demand" courses in them in order to attract more white students.

It also undertook to increase the proportion of white students at black colleges from 11.2 to 15 per cent by 1986-87, and of black students at white colleges from 7.4 to 10.6 per cent. But these were to be targets and not enforceable quotas.

The NAACP legal fund objected to the scheme immediately,

claiming that it did not meet the much stricter guidelines for desegregation drawn up under President Carter in 1977. Two of the most important omissions from the plan were proposals to send duplication of courses by neighbouring black and white colleges or to set firm targets for increasing the proportion of black lecturers in white universities.

Last week's court decision provided a crumb of comfort for the legal fund, however. A vigorous dissenting opinion by one judge agreed that the North Carolina settlement failed to meet federally-established criteria. He called on the Education Department to withdraw from the agreement.

Mr Joseph Rauh, a lawyer for the NAACP legal fund, said the civil rights organisation would take the issue to the Supreme Court if that was the only way to force the Education Department to enforce the civil rights laws.

Should the fund succeed in forcing a change of policy, the Education Department possesses powerful tools for forcing recalcitrant southern states to hasten their desegregation efforts. In extreme cases, the department could cut off federal higher education funds from states which refused to comply with civil rights orders.

Tax law on computer gifts proves mutually beneficial

from E. Patrick McQuaid

CAMBRIDGE, Mass.

American colleges and corporations are mutually benefiting from a recently enacted federal tax law allowing industry to donate computer equipment to universities and to write off 80 per cent of their retail value when preparing tax schedules.

In Boston, Northeastern University is emerging as the envy of local colleges, having acquired nearly \$400,000 worth of hardware from Data General, the corporation's single largest gift ever. Northeastern which claims the nation's largest private undergraduate engineering school, with enrolments exceeding 6,000 part and full-time students, now has two of the most sought-after computer systems for its students.

The Data General gift is a 32-bit system with 30 visual display terminals and individual student use. The system has a capacity to store 227 million characters of information and has a printer which produces copy at 660 lines-per-minute. The university already has a similar system donated in part by Digital Equipment Corporation, and now plans to open a 24-hour student computer centre.

Thus far Data General has contributed \$2.2m in computer equipment to American schools, \$1.8m of which went to colleges and universities in Massachusetts, where Data General and an array of other computer manufacturers are located. Spokesmen say the company also benefits by increasing the pool of available engineering talent and, especially, because these engineers will have been trained on Data General equip-

ment.

Data General has donated similar computer systems to the public Universities of Massachusetts and University of Lowell, as well as to the Worcester Polytechnical Institute - all located at strategic compass points throughout the state.

Digital Equipment, however, made 250 separate donations during the financial year ending this July. In all, the gifts total \$45m with an additional \$7m in computer equipment going to other non-profit making organizations such as health and cultural agencies.

Wang Laboratories announced in January it plans to donate some \$3m worth of hardware and software to be distributed among the state's 30 public campuses. An Wang, president and founder sits on the Massachusetts board of regents of higher education, the legislatively appointed steering committee.

In addition to its two 32-bit systems, Northeastern still leads the pack with its state-of-the-art collection of Computer-Aided Design and Computer-Aided Manufacturing systems. This coming term Northeastern plans to put a CAD/CAM system donated by Computerisation corporation, worth \$500,000 to use in a mechanical engineering course.

In October the Massachusetts Institute of Technology, the first American school to have a formal program in electrical engineering, plans a special symposium addressing the need for new patterns of engineering in a world characterized by rapid technological change and engineering systems of increasing complexity.

White House relaxes research rules

Years of protest by America's academic community have at last persuaded the White House Office of Management and Budget to relax its notorious "A-21" regulations, which lay down the procedures with which university researchers have to account for their use of federal grants.

The old regulations demanded that academics receiving research grants file comprehensive "effort reports" specifying in minute detail the amount of time they spent on research, teaching and administrative

chores. Universities complained that it was unrealistic for busy academics to break down their activities with such precision.

In some cases, dislike of the regulations has resulted in universities turning down federal research grants. Earlier this year Yale refused a \$300,000 mathematics project from the National Science Foundation because its recipient, Dr Serge Lang, said he would not sign the A-21 form.

Under the modified regulations, it will be easier for academics to account for their use of federal funds. For the first time, administrators will be able to fill in the forms on behalf of the researcher themselves. And the OMB will no longer insist that universities follow the OMB's own complex system of accounting.

The new regulations will also simplify the procedures under which the federal government's share of over-research contracts is divided between the government and the university. University leaders have expressed guarded satisfaction with the revisions, which are based closely on proposals submitted to the OMB by the Association of American Universities - the organization representing the nation's 50 major research universities.

But higher education leaders hope the revised regulations are a forerunner of better things to come. Soon after coming to office, the Reagan administration set up a working party to look into the possibility of easing government regulations across the board. Many university administrators would like to see more reduction federal accounting procedures as they affect higher education.

times, the
circumstance 8 n.
present time 121 n.
time-saving
theology 973 n.
higher education
education 534 n.
supplement
increment 36 n.
augment 36 vb.
adjunct 40 n.
make complete
54 vb.

Do words fail you when the common room copy goes missing?

It need never happen again. Just fill in the coupon below applying for a year's subscription to The Times Higher Education Supplement and you will receive a copy of the very latest Roget's Thesaurus absolutely free of charge. This handsome hardback volume specially bound for the Times Higher Education Supplement contains 1300 pages with thousands of clear and concise definitions of words and phrases in current usage. The recommended retail price is £7.95.

Please send the coupon together with your cheque for £22.50 to the address below.

This offer applies to new subscribers in the U.K. only

Please send me my free THES Roget's Thesaurus and a year's subscription to the Times Higher Education Supplement. I enclose my cheque for £22.50. (Cheques made payable to Times Newspapers Limited)

NAME _____

ADDRESS _____

SIGNATURE _____ DATE _____

Please send this coupon with your cheque to Nigel Denton, The Times Higher Education Supplement, Priory House, St John's Lane, London EC1M 4BX

Pay freeze could signal the start of cuts

DUBLIN
A recent attempt by the government to secure a three month pay freeze could signal the start of public sector cuts which could deeply affect the universities.

After a period of rapid economic expansion, the republic's finances are in difficulties. Inflation, borrowings and the budget deficit are among the highest in the EEC but so is the birthrate and the percentage of young people.

The attempt by the coalition government earlier in the year to introduce a draconian budget failed because it was too severe. In the subsequent election, Fianna Fail was elected to office and introduced a less harsh budget only to find it was not enough and that the budget deficit would be much greater than planned unless corrective measures were taken.

So the three month pay freeze and cutbacks in the targeted provision for all departments were ordered by an increasingly worried government. Almost 300,000 public sector employees - including college staff - were due a 5 per cent rise this autumn and predictably, the trade unions and opposition parties have pledged resistance to the moves.

But the economic prospects for next year are even gloomier, and it is generally recognized that some order needs to be brought into the state of public finance.

In a few weeks, the government will publish an economic plan aimed at bringing about a "more compact and better structured economy". Universities and colleges will be affected by all this belt-tightening in a number of ways: already there are

John Walshe reports on the financial problems faced by Eire's tertiary sector

hints that increases in current spending next year will be well below the expected inflation level while some capital projects are likely to be delayed.

The demands to cut expenditure are coming at a time of increasing demand for places. With half the population under 26 years of age, the highest birthrate in the EEC and one of the lowest participation rates in third level education, it is easy to see why this demand will continue to rise - escalating tuition fees and inadequate student support notwithstanding.

There are about 42,000 full-time higher education students at present, and the government's target is for 51,000 places by the end of the decade, considerably below the previous coalition government's target of 65,000 places.

The Higher Education Authority - a statutory advisory body - says the lower target can be reached, if not exceeded, provided an adequate level of total income is maintained. In other words, much more money is needed.

But the authority makes it clear - in a revised version of a Four Year Plan - that it does not regard even the present level as adequate. The original version of the plan set down the minimum necessary to keep the universities "flicking over" until 1985. The revised version shows that there was a shortfall of IR£5.3m on even this minimum in the current year.

The new version says the cutback

on expenditure has been achieved to a large extent by not filling vacancies and by reducing substantially the number of new posts. Currently it is estimated that there are some 72 academic and some 92 non-academic posts unfilled in the state's five universities colleges.

But the cutback on non-pay expenditure is also severe and is causing concern because of its damaging effects in the long run. For example, the plan cites the case of University College, Galway where non-pay costs are budgeted to increase by a mere 6.5 per cent over the 1981 level when inflation is running at three times that amount.

The revised plan says it is hard to see how the 1983 estimates can, in present circumstances, be very much ahead of the 1982 level in real terms (but inclusive of additional pay costs) and no useful purpose is served by not recognizing this as a fact.

If the HEA fears come to be realized the universities are likely to fare worse than the non-university sector, especially on the current side. This is because there are certain commitments which have to be met in the non-university sector first; for instance, the new National Institute for Higher Education in Dublin will have to get more staff, as will the National College of Art and Design which has moved to new accommodation in old Dublin.

On the capital side, the planned projects for the next few years in higher education would eat up practically all the funds available for educational buildings at all levels. For instance, four new regional technical colleges have been promised by all main political parties for the greater Dublin area, a further couple have been promised in the west and midlands while planning is at an advanced stage for the biggest ever educational building in the country - a new engineering school for University College, Dublin.

Soviets boycott congress

from Geoff Maslen

MELBOURNE
An Australian government decision to stop two Russian biochemists attending an international seminar in Perth last month has threatened Australian sponsorship of two big science conferences next year.

A spokesman for the Australian academy of science said the World Solar Energy Congress and a big convention of physiologists in Sydney in 1983 would be moved to other countries unless the Australian government excluded scientists from international sanctions.

Two Soviet scientists, Professor Yuri Ovchinnikov and Professor S. S. Debov, were refused entry visas to attend the Perth biochemistry conference as part of Australia's protest against the Soviet invasion of Afghanistan and recent interference in Poland.

As a result of Australia's action, another 18 Soviet scientists boycotted the congress, one of the biggest scientific meetings held in Australia. Scientific exchanges have been suspended between the two countries because of Australian sanctions against Moscow and a high ranking Soviet official has been banned from entering Australia.

Professors Ovchinnikov and Debov were refused entry because the Federal Government regarded them as senior Soviet officials. Delegates to the Perth conference were said to have been outraged by the move which they said breached an agreement between world science organizations ensuring "free circulation" of scientists at international meetings.

Scholars seek asylum

Two Polish scholars, employees of the Polish Academy of Sciences, are seeking political asylum in Norway, after a dramatic helicopter chase.

The two, whose identities are being kept secret by the Norwegian foreign office, were working at the Polar Research Station at Hornsund, where the Institute of Geophysics of the Polish Academy of Sciences has a meteorological, biological and earth sciences programme.

On August 10, the two radioed the governor of Spitzbergen, a Norwegian island asking for political asylum.

A Soviet mining concession (operating nearby on the basis of an international treaty) picked up the transmission and on August 12 the two men began their cross-country trek and were buzzed by Soviet helicopters.

On hearing of the incident, the governor dispatched a helicopter to pick up the two men. This was intercepted by the Soviets and forced back to Longyearbyen. The governor then took to the air in his own helicopter; the Soviets took to the air again, but this time the Norwegians won the race, and the governor collected the refugees.

Computers take the strain out of training

from Geoff Maslen

MELBOURNE
An Australian government decision to stop two Russian biochemists attending an international seminar in Perth last month has threatened Australian sponsorship of two big science conferences next year.

A spokesman for the Australian academy of science said the World Solar Energy Congress and a big convention of physiologists in Sydney in 1983 would be moved to other countries unless the Australian government excluded scientists from international sanctions.

Two Soviet scientists, Professor Yuri Ovchinnikov and Professor S. S. Debov, were refused entry visas to attend the Perth biochemistry conference as part of Australia's protest against the Soviet invasion of Afghanistan and recent interference in Poland.

As a result of Australia's action, another 18 Soviet scientists boycotted the congress, one of the biggest scientific meetings held in Australia. Scientific exchanges have been suspended between the two countries because of Australian sanctions against Moscow and a high ranking Soviet official has been banned from entering Australia.

Professors Ovchinnikov and Debov were refused entry because the Federal Government regarded them as senior Soviet officials. Delegates to the Perth conference were said to have been outraged by the move which they said breached an agreement between world science organizations ensuring "free circulation" of scientists at international meetings.

Scholars seek asylum

Two Polish scholars, employees of the Polish Academy of Sciences, are seeking political asylum in Norway, after a dramatic helicopter chase.

The two, whose identities are being kept secret by the Norwegian foreign office, were working at the Polar Research Station at Hornsund, where the Institute of Geophysics of the Polish Academy of Sciences has a meteorological, biological and earth sciences programme.

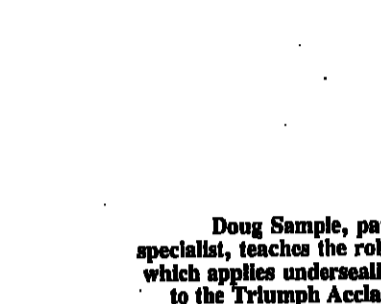
On August 10, the two radioed the governor of Spitzbergen, a Norwegian island asking for political asylum.

A Soviet mining concession (operating nearby on the basis of an international treaty) picked up the transmission and on August 12 the two men began their cross-country trek and were buzzed by Soviet helicopters.

On hearing of the incident, the governor dispatched a helicopter to pick up the two men. This was intercepted by the Soviets and forced back to Longyearbyen. The governor then took to the air in his own helicopter; the Soviets took to the air again, but this time the Norwegians won the race, and the governor collected the refugees.

Computers take the strain out of training

British Leyland wants to lead the way in Open Tech learning by using robots as teachers. Karen Gold reports



Doug Sample, plant specialist, teaches the robot which applies undersealing to the Triumph Acclaim

Let foreigners make their cars with robots; British Leyland, hoping to be in the vanguard of the Government's Open Tech programme is about to train its car makers with computers.

Computer-based learning is the best one-upmanship BL has thought of in years. Commercial, technological and patriotic as well.

Being BL, it's also controversial. The company's learning resources manager, Jim O'Mahony, argues that computer systems are the up-to-date answer to almost all the training problems caused by ever-accelerating changes in manufacturing technology.

The days of the training course - and the implies of the classroom trainer - are numbered. "We're posed with a problem. We need to bring in new systems, therefore we need to train people in new systems. We have trainers who go round and deliver training within a two-day period, at the end of which people are experts."

But there's a limit to how many people you can put into a classroom before the training suffers. You can measure learning effectively with about 10 people in the classroom, but then you can't train enough people in time.

"So we asked ourselves, why do we need people to deliver the learning? And the answer was, we didn't. It's important to have experts around to solve problems, but we are talking about something which is mechanical and sequential and logical. Therefore it can be taught by a machine."

For those who balk at the idea, Mr O'Mahony has more food for thought. The computer can teach not just technology, but management skills too, he says.

"I believe provided your objectives are set out in an accurate and achievable format, then open learning can be used for teaching anything. The micro-computer delivers and controls the learning process. For example it might direct the student to work books or to watch a



Let foreigners make their cars with robots; British Leyland, hoping to be in the vanguard of the Government's Open Tech programme is about to train its car makers with computers.

video, and then test his understanding when he comes back. The computer is the main teaching aid, and people go to it to get their learning.

With such enthusiasm, it is hardly surprising that the Manpower Services Commission Open Tech unit has been making welcoming noises in response to Mr O'Mahony's application for pump-priming money on behalf of BL's production companies: BL Cars; BL Technology; BL Systems and the Land Rover Group.

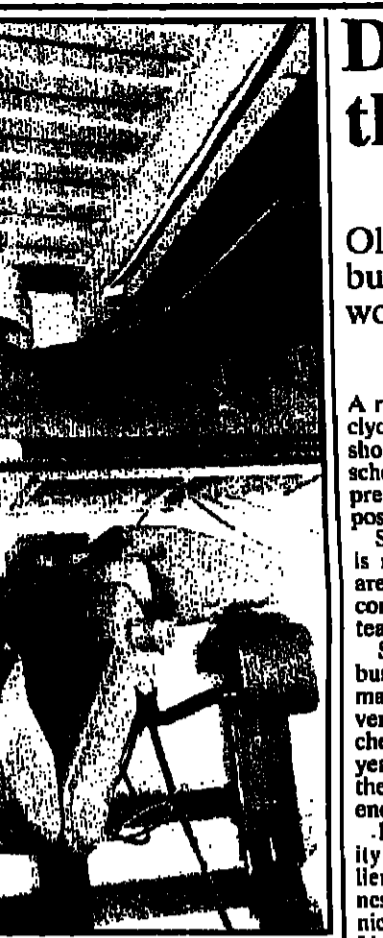
The total cost of the three years in which the companies are seeking Open Tech support is around £750,000; BL is understood to have requested just under half of that. If they don't get it, says Mr O'Mahony, open learning will still go ahead - but at a much-reduced pace.

If they do... the consequences he predicts are more than considerable: a possible quadrupling of the number of people trained by the company within three years - from the present 5,000 to 20,000; a reduction of learning time by a minimum 30 per cent; cuts in travelling and tutor costs which are impossible to predict.

And, of course, a more efficient company. The barriers to faster and more widespread training of the workforce identified within BL are almost identical to those targeted by the MSC: difficulty in releasing employees regularly or for a block of time; the need for training near the workplace, at lower unit costs and with individually-tailored material and pace.

Whether open learning really does solve these problems without creating more will be tested next month, when a BL pilot project training engineers starts in a new computerized procedure begins among key employees.

Before the project began, BL's training division underwent a quiet revolution. Management and technician training, once separate, were combined, and a special open learning unit of computer enthusiasts was



Let foreigners make their cars with robots; British Leyland, hoping to be in the vanguard of the Government's Open Tech programme is about to train its car makers with computers.

established. As the innovators responsible for making computer-based training work, the trainers in that unit are part of Mr O'Mahony's new breed.

"One of the major considerations is the training of training staff, to make them competent to develop high quality material - and the quality is very important. That will put a demand on the trainers preparing it to be much better."

"We will use subject experts rather than training experts: in medicine it's the top surgeon who teaches the new doctors, not trainers. We can't use experts to teach because they haven't got the time, but we can take material from them and have it available."

"People are going to feel threatened by having machines doing the teaching instead... but it will also bring in a different type of industrial trainer to the one we have had in the past. It will attract brain-power into the profession from sources where we have never had it before."

The first people to be trained under the BL proposals to the Open Tech would be technician and supervisory staff, again as set out in Open Tech guidelines. Subject areas suggested include micro-electronics, mechanical and electrical engineering as a combined subject - again to promote flexibility among workers commonly trained either in one or the other - statistical analysis and supervisory skills.

Soon however, open learning would spread to management and to hourly-paid workers, eventually on to the production line itself.

Employees who wanted to follow a course not required for their job could do so free of charge although procedures are being worked out for unemployed people to use the courses, though not at BL manufacturing plants. About 70 per cent of the material produced will be available to the MSC, and the rest of engineering industry - at a fee - with the rest held back because of commercial confidentiality.

The key to these plans is the open learning setting: the place where the training takes place; Mr O'Mahony plans to have a "remote learning centre" in every BL plant initially, but envisaged nine within three years of starting the programme, now he hopes for more.

Each centre will be staffed by an administrator but no trainers, and open throughout the day and night shifts.

Universities and colleges will be encouraged to develop material for the courses, although they may work closely to BLV specifications. A Warwick University student is to monitor the programme as a PhD topic.

But whatever teaching troubles the programme may encounter, BL trainers are convinced that computers are their future.

Department that's in the business of success

Olga Wojtas reports on the department of business studies at Stirling University which has worked hard to sell itself

A recent survey conducted by Strathclyde University's business school shows that business and management schools are not only surviving the present financial difficulties but are positively thriving.

Student numbers are increasing, as is research, and most of the schools are earning more than half their income from sources other than teaching.

Scotland's newest department of business studies, which opened formally on August 1 at Stirling University, is no exception. Stirling launched a degree in business studies six years ago, but it was run jointly by the departments of management sciences, accountancy and economics.

Eighteen months ago, the university appointed Tom Cannon, an ebullient Liverpoolian, professor of business studies, but he did not technically head a department until last session in its cryptic fashion that it would view business studies at Stirling "sympathetically" if it was a separate entity.

"That time people view you most sympathetically is at your funeral," one academic commented dryly. "But there is little fear for the future of business studies. At present there are six members of staff in the department with one new post funded by the Manpower Services Commission, but a number of academics in other departments contribute to courses."

It is hoped that the UGC, which this week was gathering background information at Stirling for a visit in October, will be prepared to provide more money for business studies as a result of the department's success.

There are more than 11,000 applications for 50 places next session, and Professor Cannon says up to 90 students may meet the stringent entrance requirements. "We may have to depend on other departments like psychology, sociology and economics, to absorb the extra students."

Job prospects are particularly good for business studies graduates. None of Stirling's 1981 graduates was unemployed by Christmas and more than 80 per cent of graduates nationally find a permanent job within a year of graduation.

"Employers are voting with their feet as far as business studies is concerned," says Professor Cannon, "as an interesting degree for them, because they like things which are not too specific, locking people into a particular career path at 20. Business studies is a general vocational degree where students have learned ways of gathering information, analysing issues and studied aspects of finance and personnel management."

So far, the UGC does not seem to have been awayed by student demand. But it is likely to be impressed by the department's, having raised around £400,000 over the past six months for developments in business studies.

This includes a new chair in distribution, endowed by the Fraser Auldman Trust, which will be advertised shortly. Retail and wholesale distribution, said Stirling's principal Sir Kenneth Alexander, "is of key importance to the effective functioning of an advanced economy, yet is largely neglected in our universities."

The department has also gained a postgraduate studentship in retailing, distribution and marketing studies, supported by £15,000 from Marks and Spencer.

"Historically in universities, you've had subject specialism, so business studies started off as accountancy, or production management. The Council for National Academic Awards recently highlighted the fact that there's a very great neglect in British of business studies. Retailing is one of these subjects - not one of the conventional disciplines has an answer, says Professor Cannon."

"It includes ourselves, accountancy, and computer science, with the impact of new technology such as laser scanning and electronic points of sales."

Professor Cannon is particularly interested in developing information studies at Stirling.

"Most companies and organizations live on their information systems, ranging from hard information like stockholdings and debitors' lists to information that's difficult to measure such as their image or reputation in the City. They have to ensure that information goes in the right quantities to the right people at the right time, but an information system has to be designed, it's not going to happen accidentally."

Tom Cannon believes that Scotland is leading Britain in information studies, helped to a large extent by the Scottish Development Agency.

"They're interested in developments in the Scottish economy, so they identify strategic areas and commission research. It has upgraded the amount and standard of what's going on in universities."

But Professor Cannon is also concerned to promote an area in which Scotland is lagging, that of small businesses. Over the past few decades, new businesses have dwindled, with entrepreneurs moving south or going abroad. Joining a large corporation has been seen by many people as the best way of achieving success, but firms are in the main satellite companies with the key decisions being made outside Scotland.

The professor would like to stimulate the entrepreneur tradition, and Stirling hopes to set up at the end of this month a fundation which will support study of small businesses and also develop learning material which can be circulated to other higher education institutions.

Already Professor Cannon has been discussing with Central Region the possibility of teaching packs for schools which would help local children become aware of small businesses in their area and the people who built them up.

Mrs Janice Davis has just been appointed lecturer in small firms, a post funded by the MSC. A modern languages graduate of Glasgow University, Mrs Davis began work as a hotel business established by her husband.

"It was very exciting, but I realized the shortcomings in my knowledge and experience, and decided to do a programme in business education." Mrs Davis took a one year MBA course at Strathclyde University's business schools, and has just been named business graduate of the year by the merchant bankers, Quinnes-Mahon.

Both Professor Cannon and Mrs Davis feel that small businesses provide "ideal" job opportunities for graduates since they are more likely to be a creative and flexible than a large company.

"There is no equivalent of the 'milkround' for small businesses," says Mrs Davis. "In the hotel we desperately wanted to employ good people in management, but the established channel to the pool of students was monopolized by large groups."

Mrs Davis is to be involved in a project creating links between the university and small firms in the central belt. And whatever developments Stirling's new business studies department makes, Professor Cannon is keen to share them with other institutions.

"I'm a great believer in disseminating ideas. It's a British academic symptom to reinvent every wheel because it's my wheel! But we've got to learn from one another, and make sure that if something works we'll get the maximum benefit from it."

Mammals maketh man

from Donald Fields

HELSINKI
Some 700 zoologists took part in the 13th International Therological Congress in Helsinki. Their deliberations covered many subjects related to mammals, and encompassed international symposia on wolves, Eurasian bears, beavers and insectivores.

Delegates exerted themselves with field studies of the fauna of Finland - notably the reindeer. The congress proceedings will be published by the Finnish Society of Zoology.

Of particular interest to biologists was the way in which molecular biology and paleontology are joining forces to establish the evolutionary pattern of mammals, including some extinct species.

Crucial to the investigations is DNA, the acid obtained from the muscle tissue of mammals, buried in the permanent belt of the northern hemisphere for up to 30,000 years. Subjected to nuclear-tide frequency research in gene libraries, this substance can even help establish how creatures that had been wiped out long ago, as well as extinct species, long



Finland's fauna: part of the evolutionary pattern

evolved. Dr Goodman described it as the "blueprint of heredity".

In less cold climates where tissue is not preserved, the main clue is provided by protein in the animal bone, but this has not yet proved useful in tracing the development of species.

From permafrost findings, Dr Goodman has been able to go back for five million years to try to establish the common ancestors of

the extinct, elephant-like creature, the mammoth.

With studies so far confined to few, the purpose is only being scratched. Dr Goodman insisted that he would pay the economy-conscious financing of research to invest in more gene libraries, since the results obtained could stimulate discussion on how to make human life better.

Backbench bill fails to restore summer programme

from Lindsay Wright

WELLINGTON
A private members' bill to restore the Student Community Service Programme, under which students were provided with fully-subsidised public sector employment during long vacations was defeated by 40 votes to 40 in the New Zealand parliament.

The unsuccessful attempt by Labour backbencher Mr Phil Goff to introduce the special bill was the summit of what must be one of the best co-ordinated campaigns yet mounted by the New Zealand University Students' Association.

NZUSA persuaded a wide variety of local bodies, speaking as employers of students under the scheme over the past three years, to speak out forcefully for its retention.

SA believes that the employment opportunities needed for students cannot possibly be created without the SCSP.

The association's claims are reinforced by leaked departmental papers prepared in May by the Secretary of Labour, the Director-General of Social Welfare and the Director-General of Education.

The three departments had held discussions to consider the implications of abandoning the student vacation work scheme and the Department of Social Welfare's concern at the possibility of losing the scheme's contribution to the national unemployment reduction scheme appeared to be a major factor in the decision to scrap the scheme.

Prof the Department of Education came the comment that the availability of vacation work for students has been steadily reducing and suspension of the scheme will mean

restricted educational opportunities for some.

The public criticisms of the government have resulted in some action. The Minister of Labour, Mr Jim Bolger, announced that the Department of Labour will pay 20 supplementary jobs to contact employers to find holiday jobs for students, and to match them to suitable jobs.

Publicity material to promote job opportunities for students over the summer is to be produced by the Department of Labour.

The scheme's abolition was announced in early June by the Minister of Labour, Mr Bolger. The Labour Department should go instead towards meeting the needs of other people, lower qualifications who need extra help than students in finding employment.

SA believes that the employment opportunities needed for students cannot possibly be created without the SCSP.

The association's claims are reinforced by leaked departmental papers prepared in May by the Secretary of Labour, the Director-General of Social Welfare and the Director-General of Education.

The three departments had held discussions to consider the implications of abandoning the student vacation work scheme and the Department of Social Welfare's concern at the possibility of losing the scheme's contribution to the national unemployment reduction scheme appeared to be a major factor in the decision to scrap the scheme.

Prof the Department of Education came the comment that the availability of vacation work for students has been steadily reducing and suspension of the scheme will mean

restricted educational opportunities for some.

The public criticisms of the government have resulted in some action. The Minister of Labour, Mr Jim Bolger, announced that the Department of Labour will pay 20 supplementary jobs to contact employers to find holiday jobs for students, and to match them to suitable jobs.

Publicity material to promote job opportunities for students over the summer is to be produced by the Department of Labour.

The scheme's abolition was announced in early June by the Minister of Labour, Mr Bolger. The Labour Department should go instead towards meeting the needs of other people, lower qualifications who need extra help than students in finding employment.



One of two synchronized welding lines for the Metro

Undergraduate courses in, say, organic chemistry traditionally introduce an abstract, self-sufficient study of molecules and reaction mechanisms.

How to break the silence

But some of these molecules have a social life, outside the lecture theatre. There is much more to learn about the weedkiller 2,4,5-T, for example, than the configuration of its electrons, and people who encounter the molecule in different situations know different things.

The television viewer knows that synthesis of 2,4,5-T under certain conditions can produce small amounts of the poison dioxin, and so does a mother from Seveso.

The television viewer probably has a vague recollection of something called Agent Orange, and of Vietnamese babies with misshapen limbs. The safety adviser knows that the weedkiller can be used without harm so long as appropriate precautions are observed. And the farm worker knows that to wait for a following wind before spraying will not earn a productivity bonus.

In the past 10 or 15 years, a number of courses have grown up which acknowledge the existence of this dimension of science, and a community of teachers and researchers now exists in the field of science, technology and society, or STS to insiders.

An ideal STS course for chemists might try to help students bring together these fragments of knowledge about 2,4,5-T, but the best way of doing this still seems an open question.

A range of answers were offered at the second conference on "Science, Society and Education", held last month in Holland, which gave STS academics a chance to review approaches to this relatively new field.

English visitors were also keen to compare notes with their Dutch colleagues to see how this educational innovation has been affected by spending cuts in both countries.

The general view was that STS teachers across the North Sea have fared rather better than their British counterparts.

In Britain, the subject now has a foothold, sometimes precarious, in most universities and colleges, but many academic groups are very small and several of the larger units face staff losses.

Dutch STS teachers and researchers seem more secure, for a variety of reasons. For one thing, the Dutch Higher Education Act of 1960 explicitly mentions "fostering the sense of social responsibility" as one of four fundamental goals of higher education. A strong student movement in the late 1960s and early 1970s supported the establishment of STS courses in Holland as a means to this end.

The same movement fostered the university "science shops" - for promoting research requested by outside groups - which have strong links with Dutch STS academics.

Science and society teachers and researchers in Holland are also more likely to be found inside science departments than in Britain, where STS courses tend to be taught from general studies or from separate, specialized units.

In addition, the general context in which STS teachers work is very different in the two countries. For example, while the British Government is trying to decide whether to allot a little money to objectors at the Sizewell nuclear reactor inquiry, the Dutch are in the midst of a massive two year programme, with government funding, designed to promote public debate about energy policy.

However, science and society teaching is certainly here to stay in both countries. According to Professor John Ziman of Bristol University the first stage in the development of STS in higher education in Britain is past. The basic philosophy of the field has been established over the past ten years, and the next decade will see it applied more widely.

But that basic philosophy can be hard to pin down. The academic problems of the field are very similar in the two countries. As the case study of 2,4,5-T shows, the problems STS research addresses touch on many different disciplines, and it is sometimes hard to see if the STS community has much in common beyond an interest in issues associated with science and technology.

One British lecturer suggested to me, only half jokingly, that STS was like geography. He claimed that there was no such subject, and that on close inspection geographers all turned out to be economists, geologists, or statisticians. "The difference", he explained, "is that geography became institutionalized before anyone found this out."

Not surprisingly, then, much of the conference discussion centred on the search for common themes and approaches. The blurb for one (American) course, found in the conference centre library, declares that "STS courses can push your mind to new levels of sensitivity to the complexity of the human condition", but this general goal can be reached in many different ways under the STS banner.

The central subject for discussion chosen by the conference organizers was "risk and participation", which certainly brought together many of the leading concerns of STS researchers. Analysis of the physical, environmental, social and economic risks of new developments in science and technology and studies of their perception by experts, politicians and the public can provide a framework for tackling some of the most daunting problems falling within any subject.

So the Dutch meeting brought together contributors on nuclear weapons and the arms race, genetic manipulation, industrial hazards, introduction of microelectronics technologies, energy policy, smoking and cancer, and pesticides, to give just some examples.

Others reviewed more general responses to growing awareness of some of these risks, such as technology assessment, and proposals for research impact statements, which try to forecast possible effects of novel scientific initiatives on the wider society.

Jon Turney reports from a conference in Holland about the teaching of science technology and society

Science and society teaching is certainly here to stay in both countries. According to Professor John Ziman of Bristol University the first stage in the development of STS in higher education in Britain is past. The basic philosophy of the field has been established over the past ten years, and the next decade will see it applied more widely.

But that basic philosophy can be hard to pin down. The academic problems of the field are very similar in the two countries. As the case study of 2,4,5-T shows, the problems STS research addresses touch on many different disciplines, and it is sometimes hard to see if the STS community has much in common beyond an interest in issues associated with science and technology.

One British lecturer suggested to me, only half jokingly, that STS was like geography. He claimed that there was no such subject, and that on close inspection geographers all turned out to be economists, geologists, or statisticians. "The difference", he explained, "is that geography became institutionalized before anyone found this out."

Not surprisingly, then, much of the conference discussion centred on the search for common themes and approaches. The blurb for one (American) course, found in the conference centre library, declares that "STS courses can push your mind to new levels of sensitivity to the complexity of the human condition", but this general goal can be reached in many different ways under the STS banner.

The central subject for discussion chosen by the conference organizers was "risk and participation", which certainly brought together many of the leading concerns of STS researchers. Analysis of the physical, environmental, social and economic risks of new developments in science and technology and studies of their perception by experts, politicians and the public can provide a framework for tackling some of the most daunting problems falling within any subject.

So the Dutch meeting brought together contributors on nuclear weapons and the arms race, genetic manipulation, industrial hazards, introduction of microelectronics technologies, energy policy, smoking and cancer, and pesticides, to give just some examples.

Others reviewed more general responses to growing awareness of some of these risks, such as technology assessment, and proposals for research impact statements, which try to forecast possible effects of novel scientific initiatives on the wider society.

In fact, perspectives centring on risk can cover more of STS studies than were included at the conference. The economic risks of industrial innovation were perhaps under-represented and, stretching the

point, the language of risk might be used to recast a good deal of work in sociology of science, as indicated by one paper on brain research and uncertainties in science.

A subsidiary theme of the meeting, and of STS studies in general, was the need for making explicit the social determinants of research and development, which most felt were neglected in traditional science education.

As Brian Wynne of Lancaster University put it: "The social origins and character of technology are rarely debated." David Collingridge from the Technology Policy Unit at Aston University showed why some scientists look askance at STS teaching when he elaborated on this theme, saying: "The best work (in STS) is motivated by the belief that science and technology have been systematically misrepresented in a way which serves the interests of their principals."

Although their subject is full of political and academic disputes, this notion drew assent from virtually all the participants. John Ziman perhaps summed up the general view, less provocatively, when he said, "conventional science education is social by its silences".

STS courses fill these silences by explaining the politics involved in choosing technologies, for example, or by showing scientists involved in making public policy acting as advocates rather than disinterested experts recounting the truth. Opinion was divided on whether STS teachers have been more successful in importing this view into mainstream science education, or in equipping non-scientists to deal with the technical controversies they meet in everyday life. But the first of these goals was clearly firmly on the STS agenda for the next 10 years.

Towards the end of the meeting Jose van Eijndhoven from the University of Utrecht summed this up by quoting from a paper prepared for the Dutch academic council, which

advises the government on higher education. This paper suggested that the purpose of STS work is to help "critical reflection" become an integral part of scientific activities.

In the same session, Professor Aric Rip of Leiden, one of the pioneers of STS teaching in Holland, hinted that one of the first hopes of the movement had been to help bring about deeper changes in science. "Looking back to the period when STS research and teaching started... it is clear that we were motivated by a feeling of standing with empty hands in the face of personal as well as societal problems of science, technology and society. Something, anything should be done," he said.

Professor Rip suggested that STS teachers were romantics at heart, who believed that if only a different science could be developed, the world would be a better place. With hindsight, he felt that few people had been solved by STS research, but that there was a continuing role for such work in social assessment of scientific developments, early warning of potential problems, and investigation of decision-making procedures.

This appraisal of the current state of STS work seemed well in tune with the mood of the conference. This fledgling speciality has not solved the problems of science and society, but this is surely nothing to be ashamed of, as no one else has either. What STS teaching and research has helped to achieve is placing these problems on the political, and academic, agenda.

These problems will not go away, and with the help of STS courses, both science students and their non-scientific contemporaries should be better equipped to think about them. In the end, Professor Rip suggested, there will be little future for STS research by itself, as most of the important problems are too large to be handled by one community of researchers, and demand too much specialized knowledge. The answer, presumably, is for the current band of STS researchers to join forces with scientists and technologists, rather than falling into the temptation to work as observers of science from sociological, political or economic standpoints.

This unification has started in a small way in efforts to guide research by community and environmental groups through the science shops and in work in Britain with trade unions. But there is little sign of any alliances between STS researchers and workers in the further reaches of pure science or in development of major new technologies.

These are two worlds of Indian writing in English, one dead and the other waiting to be born. Both were represented at a seminar held at the Commonwealth Institute recently, when some important issues about the future for the literature were raised.

In India English has been significant in two ways, first as the language of empire, education and administration, and then as the language of revolt, liberalism and identity, with Gandhi and Nehru heading the great canon of this literature. But with Indian independence is there justification for the development - or even, as some argue, for the survival - of this body of literature? If the colonial past is to be disowned, as it must be, does its language have a future?

The sad truth about Indian writing in English is that it is a victim of paternalism both in the West and in India. Straddling as it does two cultures, it now lies buried by a weight of cultural confusion, which obscures the realities crying out for expression. But it can prove a force, if one can rally those who are on the frontiers of language, their own and English, in India, Africa and the Caribbean, and are writing of struggle and justice with a fierce energy and radicalism. English can serve as an elo-

quent medium of expression of true identity in a free country and an interdependent world. India already is the third largest publishing centre of English books after the United States and Britain. As Salman Rushdie said recently "the empire is striking back" in English released from its insularity and provincialism.

Of the writers participating in the seminar, the major ones - Raja Rao, Mulk Raj Anand, Nirad Chaudhuri - are, like R. K. Narayan (who could not attend), all in their seventies. They write of an ordered world, the Pax Britannica where even the sunset of empire was ushered in civilly at the village and district level continued relatively undisturbed by the new values of technology. Of these Mulk Raj Anand brought out the plight of the forgotten and perennially exploited class the *Untouchable* and the *Coolie*. But these pioneering attempts have been seen by his critics as not true enough to the Indian experience because they are suffused with Edwardian liberalism and paternalism endemic to the metropolitan culture of the old Empire.

In India today English is the medium of the press and government handouts, of propaganda and dissent: in this form, it properly reflects the experiences of a nation struggling to re-

make itself. As in other countries - even literature - is politics. "The act of description" says Salman Rushdie, "is a political act". This fact is understood in its deepest sense by Indian poets writing in English or translating from the classics. They have succeeded in forging a language that is neither patronizing nor artificial, but recreates Indian experience in its many varieties. In the field of fiction, however, only two novels stand out as having successfully liberated language from its colonial bondage. Both of these are "political".

The first of these is a little-known novel, a landmark as the first blow struck at the language of empire: *All About H. Haner* by G. V. Desani (1948). It is a funny and fundamentally true expression of India's many faces: the English language in its Indian manifestations that permeate every aspect of activity, and above all the vitality and power of endurance of the people of India. The second is Salman Rushdie's *Midnight's Children* (1981). Daring experimentation, authenticity of feeling and the strains of exile that find a parallel in the experience of all men, have made this novel more than a novel of India. It is about the business of living in a world where poli-

tics dominates individual life. Perhaps the situation of Indian writing in English will be delivered from the many accusations that attend its development when it can happily co-exist with the literatures of the regional languages. It is often argued that in comparison with these, those who write in English do not sufficiently encompass the new realities, except in terms of social satire, descriptive detail which provides local colour - and not much else. Salman Rushdie has shown that such detail can be invested with both evocative and political content. That he makes it excruciatingly funny as well is a testimony of his creative genius. There will always be those who argue that these novels do not belong strictly to the literature labelled "Indian writing in English" since their writers do not live in India.

It is the narrowness of definitions, so alien to the inclusiveness of the Indian psyche, that is destroying our potential for creativity. English teaching in India is a case in point. Very little of the work of Indian writers in English or in translation is ever taught. In Indian universities "English literature" is defined in terms even narrower than in the hallowed bastions of its traditional home. It is not therefore in the faculties of English in Indian universities that one can discover the form and content of Indian writing in English. One would have to scour coffee

houses, company seminars, press clubs, political party meetings, and groups dedicated to the theatre and cinema to find it. Here one may perhaps discern the elements of beginning of an indigenous accent and tone, which a modern Indian poet, R. Parthasarathy, describes:

My tongue in English chains,
I return, after a generation, to
you
I am at the end
of my dravidic tether,
hunger for you unassuaged.
I falter, stumble.

There is little you can do about it, except throw up your hands. How long can foreign poets provide the staple of your lines? Turn inward. Scrape the bottom of your past... Ransack the cupboard for skeletons of your Brahmin childhood... You may then, perhaps, strike out a line for yourself from the iron of life's ordinariness.

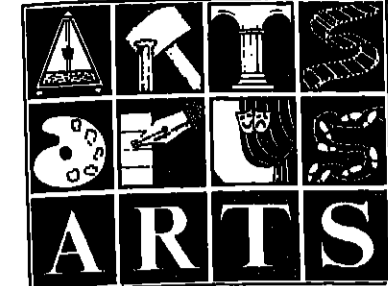
Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.



ANDREW TUDOR reviews a touring Bill Brandt exhibition; MARIA COUTO describes how Indian writers are using English.

Fiercely monochrome

It's an eye-numbing shock emerging from the Bill Brandt exhibition in Wakefield's Elizabethan Gallery. The building stands opposite Wakefield market, on a sunny afternoon packed with colour and movement, a contrast which couldn't be more extreme. For the world of Bill Brandt's photographs is fiercely, almost intolerably monochrome, his people frozen figures even where they are ostensibly in motion.

Take his 1930s photograph "The Men at Ascot Races". They stand near-silhouetted against a white and featureless sky, hands upraised in now unintelligible signals. They could almost be a group of Rodin figures - a sort of down-market "Burgers of Calais" - except that their clothing and actions firmly fix them in time and place.

That is so often the case with Brandt's "documentary" photographs. They are documents: records of places and events, of social differences and desperate circumstances. Yet Brandt transforms them: it is their character as images that strikes you first. Even the most apparently prosaic matters of record - his series for the Ministry of Information - trap their subjects in seemingly unalterable patterns.

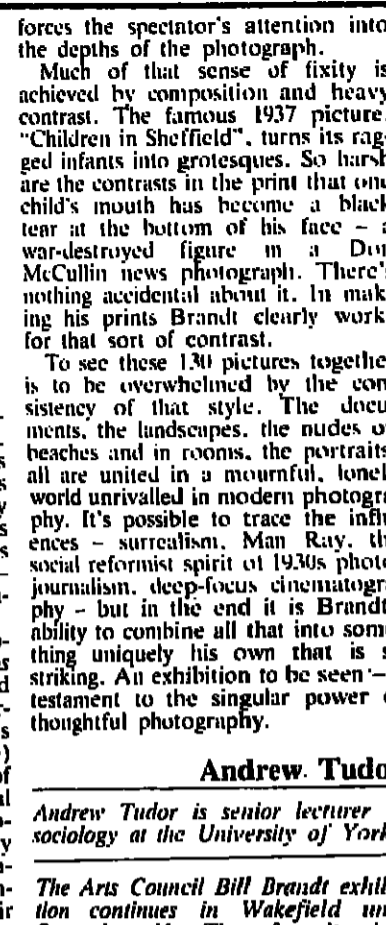
A Spanish beggar kneels in supplication, an echo of Buñuel's *Los Hurdes*: a coal-searcher, stooped over his bicycle, trails home to Jarrow; children play (though there is nothing playful about the picture) among the black gravestones of Burslem churchyard. All traditional subjects for the documentary photograph, and all transformed by Brandt's eye and camera into uniquely compelling shapes and contrasts. It's not that they lose their documentary character; rather they gain another dimension, one that

focuses the spectator's attention into the depths of the photograph. Much of that sense of fixity is achieved by composition and heavy contrast. The famous 1937 picture, "Children in Sheffield", turns its ragged infants into grotesques. So harsh are the contrasts in the print that one child's mouth has become a black tear at the bottom of his face - a war-destroyed figure in a Don McCullin news photograph. There's nothing accidental about it. In making his prints Brandt clearly works for that sort of contrast.

To see these 130 pictures together is to be overwhelmed by the consistency of that style. The documents, the landscapes, the nudes on beaches and in rooms, the portraits, all are united in a mournful, lonely world unrivaled in modern photography. It's possible to trace the influences - surrealism, Man Ray, the social reformist spirit of 1930s photojournalism, deep-focus cinematography - but in the end it is Brandt's ability to combine all that into something uniquely his own that is so striking. An exhibition to be seen - a testament to the singular power of thoughtful photography.

Andrew Tudor is senior lecturer in sociology at the University of York.

The Arts Council Bill Brandt exhibition continues in Wakefield until September 11. Thereafter it visits Darlington and Colchester.



Children in Sheffield, 1937, by Bill Brandt.

The empire striking back

These are two worlds of Indian writing in English, one dead and the other waiting to be born. Both were represented at a seminar held at the Commonwealth Institute recently, when some important issues about the future for the literature were raised.

In India English has been significant in two ways, first as the language of empire, education and administration, and then as the language of revolt, liberalism and identity, with Gandhi and Nehru heading the great canon of this literature. But with Indian independence is there justification for the development - or even, as some argue, for the survival - of this body of literature? If the colonial past is to be disowned, as it must be, does its language have a future?

The sad truth about Indian writing in English is that it is a victim of paternalism both in the West and in India. Straddling as it does two cultures, it now lies buried by a weight of cultural confusion, which obscures the realities crying out for expression. But it can prove a force, if one can rally those who are on the frontiers of language, their own and English, in India, Africa and the Caribbean, and are writing of struggle and justice with a fierce energy and radicalism. English can serve as an elo-

quent medium of expression of true identity in a free country and an interdependent world. India already is the third largest publishing centre of English books after the United States and Britain. As Salman Rushdie said recently "the empire is striking back" in English released from its insularity and provincialism.

Of the writers participating in the seminar, the major ones - Raja Rao, Mulk Raj Anand, Nirad Chaudhuri - are, like R. K. Narayan (who could not attend), all in their seventies. They write of an ordered world, the Pax Britannica where even the sunset of empire was ushered in civilly at the village and district level continued relatively undisturbed by the new values of technology. Of these Mulk Raj Anand brought out the plight of the forgotten and perennially exploited class the *Untouchable* and the *Coolie*. But these pioneering attempts have been seen by his critics as not true enough to the Indian experience because they are suffused with Edwardian liberalism and paternalism endemic to the metropolitan culture of the old Empire.

In India today English is the medium of the press and government handouts, of propaganda and dissent: in this form, it properly reflects the experiences of a nation struggling to re-

make itself. As in other countries - even literature - is politics. "The act of description" says Salman Rushdie, "is a political act". This fact is understood in its deepest sense by Indian poets writing in English or translating from the classics. They have succeeded in forging a language that is neither patronizing nor artificial, but recreates Indian experience in its many varieties. In the field of fiction, however, only two novels stand out as having successfully liberated language from its colonial bondage. Both of these are "political".

The first of these is a little-known novel, a landmark as the first blow struck at the language of empire: *All About H. Haner* by G. V. Desani (1948). It is a funny and fundamentally true expression of India's many faces: the English language in its Indian manifestations that permeate every aspect of activity, and above all the vitality and power of endurance of the people of India. The second is Salman Rushdie's *Midnight's Children* (1981). Daring experimentation, authenticity of feeling and the strains of exile that find a parallel in the experience of all men, have made this novel more than a novel of India. It is about the business of living in a world where poli-

tics dominates individual life. Perhaps the situation of Indian writing in English will be delivered from the many accusations that attend its development when it can happily co-exist with the literatures of the regional languages. It is often argued that in comparison with these, those who write in English do not sufficiently encompass the new realities, except in terms of social satire, descriptive detail which provides local colour - and not much else. Salman Rushdie has shown that such detail can be invested with both evocative and political content. That he makes it excruciatingly funny as well is a testimony of his creative genius. There will always be those who argue that these novels do not belong strictly to the literature labelled "Indian writing in English" since their writers do not live in India.

It is the narrowness of definitions, so alien to the inclusiveness of the Indian psyche, that is destroying our potential for creativity. English teaching in India is a case in point. Very little of the work of Indian writers in English or in translation is ever taught. In Indian universities "English literature" is defined in terms even narrower than in the hallowed bastions of its traditional home. It is not therefore in the faculties of English in Indian universities that one can discover the form and content of Indian writing in English. One would have to scour coffee

houses, company seminars, press clubs, political party meetings, and groups dedicated to the theatre and cinema to find it. Here one may perhaps discern the elements of beginning of an indigenous accent and tone, which a modern Indian poet, R. Parthasarathy, describes:

My tongue in English chains,
I return, after a generation, to
you
I am at the end
of my dravidic tether,
hunger for you unassuaged.
I falter, stumble.

There is little you can do about it, except throw up your hands. How long can foreign poets provide the staple of your lines? Turn inward. Scrape the bottom of your past... Ransack the cupboard for skeletons of your Brahmin childhood... You may then, perhaps, strike out a line for yourself from the iron of life's ordinariness.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.

Dr Couso taught English literature at Delhi University for 15 years. She now lives in London and is writing a book about the novels of Graham Greene.



Children in Sheffield, 1937, by Bill Brandt.

Events

- Continuing Exhibitions:
 - Ends tomorrow: Horn Gallery, Birmingham; Williams: Clear retrospective.
 - Until September 9: Craftsop, Victoria and Albert Museum, London. Crafts Council exhibition of new Dutch jewellery.
 - Until September 11: Derby Museums and Art Gallery, Brancusi photographs.
 - Until September 11: John Hansard Gallery, University of Southampton. Strategies: recent developments in British photography.
 - Until September 18: Chancellor's Building and Keele Hall, University of Keele Summer Exhibition of Society of Staffordshire Artists.
 - Until September 18: Philip Francis Gallery, Sheffield. Summer Exhibition of Paintings.
 - Until September 25: Central Museum and Art Gallery, Dudley. Big Prints.
 - Until September 26: Fitzwilliam Museum, Cambridge. Prints After Jean-Baptiste-Nicolas Chardin.
 - Until September 26: National Museum of Scotland: Edinburgh. Angela, Nobles and Unicorns: art and patronage in medieval Scotland.
 - Until September 27: Art Gallery and Museum, Kelvingrove, Glasgow. Thank You Very Much: a selection of granulated purchases.
 - Until October 3: Museum of Modern Art, Oxford. Peter Phillips: RETRO vision, and The Other India: seven contemporary photographers.
- New Exhibitions:
 - From tomorrow: Feresat Art Gallery, Hull. Hull Art Circle Annual Exhibition. Also Heugler's Circus: prints, paintings, ephemera to chronicle the life of Charles Heugler and his son Albert, circus-masters.
 - From tomorrow: Museum and Art Gallery, Blackburn. Jim Cove, paintings and prints.
 - From September 11: Museums and Art Gallery, Derby. Joseph Wright drawings.
 - From September 13: Art Gallery and Museum, Kelvingrove, Glasgow. The Italian Connection: views of Italy by Scottish artists. Part of Glasgow's Italian fortnight.
 - From September 17: The British Library, London. Exhibition to commemorate the millennium of Virgil's death.
 - From September 18: Whitworth Art Gallery, Manchester. Upon a Painted Ocean: British marine watercolours and drawings 1717-1870.
 - From September 20: Foyer Gallery, North Staffordshire Polytechnic. Drawings and paintings by Stan Smith.
 - From September 20: Commonwealth Institute, London. Australian Film and Theatre: an exhibition of books and related materials.
 - From September 20: Sainsbury Centre, University of East Anglia. Hundert Region. Landscape Gardener 1752-1818.
 - From October 1: National Gallery of Scotland, Edinburgh. Samuel Palmer: paintings, drawings and prints from the Ashmolean Museum, Oxford.
 - From October 1: Orchard Gallery, Londonderry. Goldsmiths' Holography Workshop "Work on Tour".

Felicity Jones finds out what happens when a city encourages wildlife in its open spaces

Getting back to nature in the urban jungle

Cities do not immediately spring to mind as places to watch birds, hunt out exotic of the plant world or grub around for interesting insect specimens. Those are the sort of activities which take enthusiasts out of the concrete city in their droves at weekends.

However, there is a growing body of opinion that our cities should defy the tradition that all the bits in between the buildings and office blocks should be neat squares of green, bordered by lawns and beignias, a few trees with a park bench every 200 yards.

Towns, so the new orthodoxy goes, are alive with wildlife and the town-dwellers should be encouraged to realize this fact, supporting the move to let certain parts of their city return to its wilder nature.

It is for this reason that Coventry has been put under the microscope by a small team of biologists and ecologists based at the department of biological sciences at Coventry Lancaster Polytechnic.

They have been employed since April and funded by a £37,000 grant from the Manpower Service Commission's Community Enterprise Programme on a year's project to survey

systematically all the sites of potential wildlife value within the city boundary.

The project is building on previous valuable but intermittent work carried out by local conservation volunteers to enable a complete picture to be built up of all the wildlife habitats in the city.

The six members of the team have been recording flora and fauna on all green open spaces, derelict land, public parks, sides of rivers, old railway lines, canal sides and old industrial sites for posterity's sake and to provide an authoritative record on which future policies on wildlife management can be based.

The project's supervisor Dr Andy Tasker, a lecturer in ecology in the polytechnic's department of biological sciences explained: "We are working closely with the city because we wanted a scheme which would not be seen to have been brought in from outside. Rather we wanted one in which the local community could be involved from the start, and from which local plans could be developed to improve wildlife sites with community-based help."

Quite a large proportion of Coventry is open space but there have only been scattered records of them up until now held at the city's Herbert museum. This survey should remedy that," he said.

The survey does not expect to uncover rarities. Its main purpose is to record accurately, find possible sites for wildlife reserves and lay the ground for better management.

"But it has come up with some finds to surprise the uninitiated. Such as the Chinese muntjac deer - imported to Woburn Abbey and now naturalized - roaming happily at the bottom of gardens."

Warwickshire Nature Conservation Trust, which is involved in the survey, has already established two urban wildlife gardens along the lines in which it is hoped the survey will spawn new natural habitats.

One of the wildlife gardens was the garden of a demolished house which could not be redeveloped because of the planning of trees and digging out ponds making use of the labour of volunteers.

Coventry is not all industry and housing. There are areas of woodland and one of our aims is to show people who live here that there is more life in their city than they think," said Dr Tasker. He hopes to produce a booklet of the city's wildlife with colour pictures taken in spots known to local people to reinforce this idea.

"People like to see closely-mown grass because it looks neat and tidy. We want to get across the idea that there are different ways of managing



green spaces and derelict ground. In Holland large amounts of government money have been set aside for wildlife and urban landscapes have been designed with that in mind.

Polytechnic students will also be encouraged to get involved in the survey. They will be asked to analyse the soil and plant life to try to devise and implement management plans for particular sites.

The better planning of urban green spaces was the primary reason why Coventry City Council planning de-

partment became involved in the survey and provided open access to its maps of the city.

It followed on the success of Impact 81, a campaign which involved local residents' groups on projects such as tree planting, pond-clearing and path-laying and stimulated local involvement at the grassroots.

"We try and develop plans from a comprehensive material, but we have been flying by the seat of our pants up until now," said Mr Peter Hunter, city planning officer working on the project. "This project should make us aware of those areas of value and importance."

Already the survey has highlighted the importance of two valleys which run through the city. "They are only small, but their impact is extremely important. There are continuous green open spaces, parts which are used as school playing fields and other parts which are relatively wild."

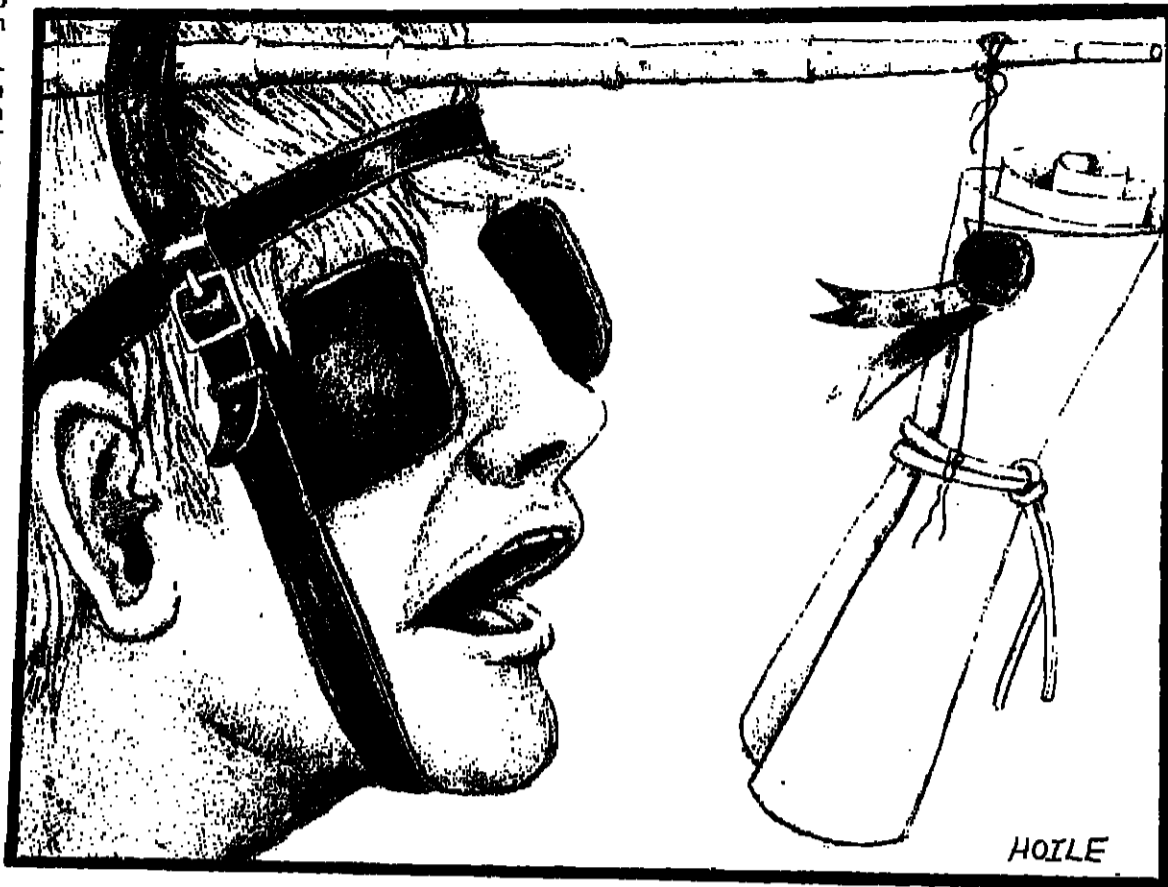
"We should now have the information needed to retain those wilder parts," intact," said Mr Hunter.

Financial pressure on the parks department means that it finds difficulty keeping the municipal parks up to the same standards.

The planners hope that the survey might encourage the park-keepers to leave the grass on river banks to grow as a natural habitat for wildlife, releasing resources for the better upkeep of those parks designed in the last century which would not adapt easily to the new look urban gardens.

Britain's universities face contraction and pressure to emphasize science and technology at the expense of the humanities and social studies. Gone are the days of the Robbins report, which advised expansion of student numbers and left student demand to determine the size of enrolment in different subjects.

Speciality of the day



Students' horizons are being narrowed by specialized degrees says David Raphael

Lord Robbins himself has continually said that his recommendation for expansion presupposed a return to the ordinary or general degree for many among the influx of students. It has not happened. The English universities in particular are so enamoured of the specialized honours degree that they tend nowadays to regard a general pass degree as a consolation prize for failure to reach honours standard.

A specialized degree may well be right for all or most students of the natural sciences but it is not the most suitable form of higher education for all or most students of the humanities and the social sciences. The average student who ends up with lower or third class honours in a narrowly specialized curriculum would often be better served by a wider spread of subjects studied at lesser depth.

The case is particularly strong for the humanities. The basic humanities subjects, history, philosophy and literature, can make a valuable contribution to the education of all students but of course not at the specialized level of an honours degree. Now that the universities are being urged to give more emphasis to natural science and technology, teachers of humanities subjects ought to think again about their own role in the process of higher education.

Two or three generations ago, most gifted children in Britain were steered into the study of humanities subjects at school and university. Classics in particular was thought to be the best kind of education for those who could cope with it. Thomas Gaisford, sometime dean of Christ Church, Oxford, is supposed to have said in a sermon: "A classical education... enables us to look down with contempt on those who have not shared its advantages, and also fits us for places of emolument not only in this world but in that which is to come."

The apocryphal report was always just a joke but it was enjoyed as a caricature because it contained a grain of truth. Many educators believed that a classical education fitted a good student for almost any position of responsibility in government or administration (as well as being a sound foundation for specialized vocational studies in law or divinity). That idea now seems antediluvian, though I have recently heard an engineering professor and an economist, each in their own way, talk as if the mythical superior attitude of the humanities graduate still existed. Most graduates in the humanities feel anything but superior today. They enjoyed their education and think that it did them good as human beings, but they are very conscious that it left them ill-equipped to understand the technological and economic aspects of the modern world or to compete for scarce jobs.

In my experience good arts graduates feel rather different about their education. When I ask people of my own generation who like myself took the famous Oxford classics course "Greats" whether they would advise school children of the present day to choose it, most of them say no. All the pressures on bright school children now are to take a university course in a natural science, or in a directly vocational subject like engineering, medicine, law, or accountancy. For the moment the social sciences have lost some of their popularity though I think this is just a temporary phenomenon. At any rate, the specialized study of the humanities has fallen into disfavour with advisers.

Let me make two things clear. First, I am not saying that they find their science or technology boring. A few of them do because they have been shunted on to the wrong track. But most of them do not. They are happy enough to be learning science or technology, but they find their course excessively narrow.

Second the opportunity at Imperial College to include a non-technical course in the curriculum allows students to choose a more obviously utilitarian subject like economics, industrial sociology, accountancy or a foreign language, and just as many go for one of these utilitarian options as for a humanities course. The foreign language courses are run by the humanities department and include some study of literature and institutions, but for the most part, they concentrate on acquiring competence in the use of the language.

So I am certainly not saying that students of science and technology enjoy the humanities more than the natural or social sciences. What I am saying is that many of them are glad to include some study of the humanities in their courses. They are interested in debating questions of value, of critical appraisal of the foundations of belief (scientific, ethical, political, religious), of the explanation of human actions - individual and social.

This is well recognized in the United States, where the basic form of higher education for most students is a BA course in the liberal arts and sciences. A considerable proportion then go on to graduate courses in science, law, medicine, or other specialized disciplines. At the level of the BA, however, Americans still believe in the value of the liberal arts and sciences for giving young people an all-round appreciation of human knowledge and human values.

It is also recognized in Scotland to some extent, though to a lesser extent than a generation ago. The ordinary MA degree of the older Scottish universities is still a respected degree, taken by a fair number of students. A generation ago it was taken by many more, as a sound general education preliminary to a more vocational training for primary school teaching, social work, law, or the church. It included as core requirements a course in philosophy,

one in a foreign language, and one in mathematics or a natural science. Not less than five subjects had to be studied, at least two being carried to a higher level.

Scottish students who wanted to take the more specialized honours degree were not finally accepted for such a course until they had shown their ability in the ordinary classes. They were also required to include in their honours curriculum a couple of outside subjects at ordinary level. These last two requirements, reaching a fairly good standard in the ordinary classes and studying a couple of outside subjects, still apply to the honours MA degree in the older Scottish universities. The result was to guarantee some breadth, without neglecting depth, in the education of all graduates in arts, law and social studies.

After the second world war there was a change. More students took the social sciences and engineering. The humanities were distinguished from the humanities and the humanities sought a degree structure of their own. The academic lawyers decided that they could equip law students with all they needed by means of a first degree in law, either honours or ordinary, provided that the curriculum included at least one humanities course.

Along with this tendency towards specialization, the requirements of the ordinary MA degree were loosened. At Glasgow, for instance, the requirement to include mathematics or a natural science was relaxed and history as an alternative option, to the old idea of retaining a bridge between the humanities and natural sciences, simply disappeared. Then there was a campaign to replace the foreign language requirement and to remove the philosophy requirement too.

Another healthier change has been the provision of a more depth than the ordinary MA degree in some subjects. In the four older Scottish universities, the honours MA degree has a common term for the humanities, a degree in the humanities, which would follow a single subject. But there is good reason to believe that the original general idea of the ordinary degree for the average student, that breadth rather than narrow depth alone, and a measure which was

ensure that the breadth is not all superficial or easy-going. It should include some acquaintance with different subject areas that are reasonably regarded as vital. Mathematics and natural science because of their importance in the modern world; philosophy for its fostering of a critical attitude; perhaps some form of history, to show us how our present experience and state of mind depend on our past; perhaps some language and literature, though it may be that these should be encouraged rather than required.

There can be variations on this theme. The foundation year at Keele, influenced by the Scottish idea of the ordinary degree as a preliminary to the more specialized honours course in the subsequent three years. A number of other universities require students to take three or more subjects in their first year before specializing in one or two of them (in practice it is more often one than two).

Such programmes share with the Scottish tradition the idea that an honours course should not be confined to the student's specialized field but should include one or two level. They do not, however, acknowledge any need to offer a broader curriculum with less depth to students of moderate ability.

The relative breadth of the first year in these programmes does not naturally vary with it, for, by its nature, any specific curriculum for a course in philosophy or a foreign language. But the mere fact that it is possible gives scope enough to the keenest of teachers.

Let me cite Reading as an example. When I was there ten years ago, a large number of arts students, the majority of whom had been proceeding with the subject beyond the first year. The course was also taken on by a fair number of students of mathematics, but this was simply because the head of the mathematics department, a refugee from central Europe, thought that everyone and encouraged his students to try it. In the philosophy department itself, the primary aim of our first year course was not to provide the most suitable foundation for a specialized study of the subject. That was econ-

dary. Our primary aim was to show how philosophy could contribute to the general education of students who were not going to specialize in our subject. Of course we were glad to do our best for the dozen or so students each year who went on to an honours course in philosophy. But we also took some pride in the thought that we were helping to broaden the minds and sharpen the critical abilities of well over 100 students who would go on to specialize in other disciplines.

Contrast the position in the University of London. Four of its multi-faculty colleges have departments of philosophy. They cooperate admirably in their teaching arrangements for students, both undergraduate and graduate, who are specializing in the subject. But none of them has a first year course designed to contribute to the general education of students aiming at honours in other subjects than philosophy. The whole idea is foreign to the present arrangements for the BA degree at London. There are multi-faculty colleges there which do not have a philosophy department and colleges in which a student of French reads Descartes and Sartre but has no opportunity to see how teachers of philosophy deal with these thinkers.

If one is familiar with the Scottish tradition of treating philosophy as a core subject for virtually all students of the humanities and social sciences, or with the Oxford tradition of allying philosophy first with classics, then with social studies, then with psychology, and more recently with mathematics, the natural sciences and languages and literature, one thinks of philosophy as an essential discipline in any university. Not so in London.

In London, philosophy is merely another specialism. As such, it attracts comparatively few students. At a time of economic retrenchment, specialisms that cater for small numbers of students are scrutinized for possible abolition. Philosophy is no more immune than classics, Russian, or the history of art.

I take philosophy as an example because I know most about it and what it can do. I am not saying that it is the only subject which can do more than cater for specialists. All the central humanities subjects can and should do more than cater for the specialists.

If the teaching of classics at university level had stood still, classics would by now have disappeared from a number of our universities. The specialized study of the classical languages and literatures could indeed be concentrated today in half a dozen centres of excellence. But such a development, taken alone, would omit the contribution that classics can still make to the education of a much larger number of students. Fortunately the teachers of the subject have been alive to what can be done with classical literature in translation. In consequence the decline in the number of old-style classics among students has been matched by a remarkable increase in recent years of students eager to take the new-style approach to the ancient world.

This is not a question of how we should retain jobs for the boys. It is a question of how we should retain the educational value of classics or philosophy - or indeed any number of other humanities subjects. So far as one can see, the popularity of history or English is not threatened. That of foreign literature is, because of greater emphasis on the utilitarian aspects of the study of foreign languages.

English universities are falling down on their job when they insist on squeezing all their undergraduate students into their undergraduate honours course. They deceive themselves into thinking that, by having raised the standards of higher education for the average undergraduate by getting rid of the ordinary general degree, they have done it.

What they have in fact done is to narrow the horizon of these students without any compensating advantage. University teachers of all humanities subjects should be asking themselves how they can retain the educational value of their subjects for a wider range of students than their own specialists.

The author is professor of philosophy at Imperial College, London.



Would cloning lead to a lessening of respect for the individual?

Test-tube reproduction was the centre of attention earlier this year, following a BBC Panorama programme and ITV's Test Tube Explosion. The British Medical Association and the Royal College of Obstetricians and Gynaecologists both announced their intention of inquiring into the ethical implications. An editorial in Nature (Feb 4, 1982) suggested that "if ethical committees wish to brood about something tangible, they should worry about cloning - still some way off but no longer out of sight".

These committees no doubt have cloning as one of the items on their agenda, but it is worthy of separate and detailed study. Letter after letter in the press on the subject of the new reproductive technologies has called for a wider public debate to discuss their ethical implications. Cloning, asexual reproduction that brings into being an individual derived from a single parent and genetically identical to that parent, is probably now a familiar term to everyone. The film *The Boys from Brazil* showed a (fantasy) attempt to produce identical copies of Hitler by cloning from blood cells taken from him before his death and by engineering near-identical family environments for the cloned offspring. As a result of such popular ideas (and fears) about the ways cloning might be used, it has become one of the most controversial areas of genetic technology.

In cloning, the nucleus of an unfertilized egg is removed and replaced by the nucleus of a body cell of the organism of which one wants to produce a copy. The egg is then stimulated to develop into a replica of the donor of the nucleus. Experiments upon mice have been successful only by transplanting nuclei from early embryonic cells, but in the case of frogs, nuclei have been transplanted from adults. The possibility of transplanting a nucleus from an adult human and producing a genetically identical human being cannot be dismissed. Every body cell of an adult human contains the same complete set of genes, so in theory any one of them would serve the purpose.

In trying to assess the moral problems involved, it is important to start with a distinction between cloning the dead and the cloning of living individuals. *The Times* (Jan 22, 1980) carried a story about an attempt by Soviet scientists to retrieve cells from a frozen mammoth that died 44,000 years ago and reproduce it by cloning with the help of a female elephant. "Whether it would be possible to perform similar experiments with frozen human beings is not clear, but it seems best to confine our attention to the reproduction of individuals who are alive. The distinction between the two types of case is obvious: in the former the individual to be reproduced have no say in the matter, while in the latter they do."

A further distinction may be made between the situation in which the individuals do not want a copy of themselves, and that in which they do. Many of the discussions of cloning do not go into this question, but it is important. If the donor of the genetic information has not consented, problems of freedom from interference arise immediately, and raise fears of people being manipulated to satisfy the

curiosity of scientists, or to enable enthusiastic eugenicists to reproduce certain genes for the good of the human gene pool.

Unfortunately it seems to be this situation which often springs to mind when the possibility of cloning is mentioned. But in order to give this method of reproduction a fair hearing we should consider a case in which individuals want to produce copies of themselves, because if it cannot be justified in this central case, it is unlikely that it can be justified in others.

R. M. Hare, the Oxford professor of moral philosophy, has stressed the importance of having a theory to apply when tackling practical moral problems. Simply writing down one's intuitions on a subject is not what one expects a moral philosopher to do. Of course, another part of the moral philosopher's contribution is the critical examination of theories, to see which, if any, can be defended and may help in thinking about moral problems. Many people are unwilling to restrict moral problems to the satisfaction of the greatest possible number. They might uphold the principle that sex and reproduction ought not to be separated on the grounds that it is "unnatural" or "inhuman" to do so. It is not clear whether the point of the objection is both sex without reproduction and reproduction without sex or simply the latter. If it is both, then those who hold this view must oppose contraception. If it is just reproduction without sex, it must be explained why reproduction is all right but not reproduction without sex. It is very difficult to say why one is "natural" and the other not. Joseph Fletcher, in his essay on "humaneness" puts forward the view that a baby made artificially, by deliberate and careful contrivance, would be more human than one resulting from sexual intercourse. He is clearly saying that deliberation is more characteristically human than chance. Others may disagree and this lack of agreement on what is to count as human poses problems for any such line of argument.

Others may want to speak in terms of rights. By determining who has rights and what they are, perhaps we could solve moral problems. But rights too are problematic, and particularly unhelpful in the cloning debate. Some may feel from the outset that the donor's desire to be reproduced should not be satisfied. On a general utilitarian assumption the only reason for denying such a desire would be that its satisfaction would be likely to harm the general good.

Perhaps such a desire will be thought inexplicable. Yet we do not need to understand people's desires in order to take them into consideration. It may be explained in terms of a desire for survival, in that all the individual's genes will be reproduced, as opposed to only half in sexual reproduction. (To what extent the child will fulfil all the parent's hopes for it is a problem that occurs with reproduction in any form, and Menges's bid in *The Boys from Brazil* to produce a new Führer seemed quixotic and sentimental rather than, evil.)

Alternatively, cloning could be desirable simply as a way of having a child. In cases where hereditary com-

Same genes new wrapping

Identical twins do not seem to suffer for not being genetically unique, so why should cloning be worse? Ruth Chadwick discusses asexual reproduction

Identical twins do not seem to suffer for not being genetically unique, so why should cloning be worse? Ruth Chadwick discusses asexual reproduction

Identical twins do not seem to suffer for not being genetically unique, so why should cloning be worse? Ruth Chadwick discusses asexual reproduction

Identical twins do not seem to suffer for not being genetically unique, so why should cloning be worse? Ruth Chadwick discusses asexual reproduction

Identical twins do not seem to suffer for not being genetically unique, so why should cloning be worse? Ruth Chadwick discusses asexual reproduction

Individuality is extremely important and the constant thought (if he is aware of the circumstances of his birth) "I shall grow up like that" may well be depressing. It seems unduly optimistic to hope that having the same genotype will enable easier communication and thus provide a solution to the generation gap.

The necessary calculus is one that weighs the lack of individuality (the idea of being a copy) against all the other satisfactions of life. To introduce the issue of rights seems, again, unhelpful. One cannot say that individuals produced by cloning can claim that right to be genetically unique has been violated, because it is not a right which could be satisfied except by their nonexistence. Once again, preferences seem more significant than rights.

The third person directly affected in the process of cloning would be the bearer of the child. As far as the satisfaction of desires is concerned, this is relatively unproblematic, as long as he is willing to bear the cloned foetus. Perhaps at some future time the involvement of a third party would be avoided by the use of artificial wombs.

One section of society which would be pleased by the attempts at cloning would be the scientific community (or at least most of it). Cloning would provide them with valuable information about the precise extent to which genes determine personal characteristics, perhaps resolving the long heredity-environment debate.

As regards everyone else, it is not so clear. One fear is that the practice of cloning will lead to a lessening of respect for the individual, because it will become gradually acceptable that individuals are replaceable. If you lose another exactly the same. So, it is suggested, personal relationships would become devalued and *Brave New World* would have arrived. Nobody likes the idea so if cloning brings about a situation nobody wants, there is one concrete argument against it. How likely is it that such replaceability could happen depends on the extent to which shared experiences and not simply formal relationships determine our feelings for others; if it would of course be impossible to reproduce those experiences or recapture time past.

Several other possibilities have been suggested for the way cloning might affect society. One is that it could be used to produce a slave class, like Huxley's "braves"; or, quite simply, cannon fodder.

Such possibilities, however, take us a long way from the central (and most probable) case and a long way towards anti-utopian science fiction. Yet at the same time any disadvantages that accrue to an individual from being a copy will be magnified by the constant possibility of being one of a large (indefinitely large) number of such copies; all genetically identical. The satisfactions of self-reproduction in numbers cannot be very great while reproducing the great in large numbers can hardly be satisfying. Andy Warhol, who predicted that we could all achieve fame for fifteen minutes, showed the effect of simple imitation on charisma like that of Marilyn Monroe and Elvis

Presley. It simply vanishes. If people believe traditional categories of identity, family and social position are being broken down or are in danger, then cloning is unlikely to become acceptable. The worst fears are over the possible use of cloning to produce large numbers of individuals; individual use, as with so many developments, poses no obvious threat.

But finally it is important to consider the consequences for future generations, the consequences of cumulative, even if controlled, effect. Cloning has been discussed largely in the context of positive eugenics: will it benefit the gene pool? Joshua Lederberg, one of the most enthusiastic supporters of cloning, has suggested that if a superior type could be identified, we might well copy it directly rather than take risks with recombination. This will inevitably, however, carry sinister echoes of Nazi ambitions. It is future generations that will be affected by any eugenic policy of this kind; those types that have been successful in one generation may not be so under different conditions. Cloning is profoundly and essentially conservative, preserving what there already is rather than allowing for variety, a situation Darwin sketched in to the horrified fascination of visionaries like H. G. Wells.

Lederberg's solution to this is to combine some cloning with some sexual reproduction. But if we were to have just a few copies of some types (thought to be especially desirable, in the hope that these could be used to good effect in interbreeding with others, the eugenic effect on the species as a whole would be almost unnoticeable, and future generations would not be much affected either way. Here too political terrors loom, with restraints on miscegenation and South African-style "racial" laws and Nazi conceptions of racial purity a horrifying possibility.

Possibly unwelcome effects would be only likely to arise when large numbers of individuals were produced so perhaps some sort of quota system could be operated though it is hard to see how without reinforcing present-day racial, social and cultural inequalities. If cloning is employed to bring into existence a single copy of a person, then the worst fears could be allayed. Then the problem would be purely subjective, the clone's own reaction to his origins - an issue not unknown in normal, sexual reproduction and a retrospective problem in any case.

It might be suggested that, as organ transplants would be possible between genetically identical individuals without the normal rejection problems, someone might want to produce a copy of himself simply to have a ready supply of spare parts. Then the copy might have to spend his days avoiding body snatchers. Though this kind of speculation can seem like black comedy, it is a practical issue and one already encountered in medical ethics. We already have specific safeguards to prevent the forcible seizure of somebody's organs. There has already been a lawsuit in the USA in which a man tried to compel his cousin to donate bone marrow. He lost.

The author is a lecturer in the department of social ethics, St. Martin's College, Lancaster.

Specialist

BOOKS

'The dangerous edge of things'

by Peter Keating

Robert Browning: a life within life by Donald Thomas Weidenfeld & Nicolson, £12.95 ISBN 0 297 78092 1

In his witty and perceptive study of Robert Browning, first published in 1903, G. K. Chesterton claimed that while Browning's poetry was capable of inspiring endless discussion, "of his life, considered as a narrative of facts, there is little or nothing to say". For Chesterton, Browning was a highly conventional man who at one great moment in his life—the elopement with Elizabeth Barrett—acted with breathtaking unconventionality and then reverted to fairly staid, middle-class respectability. The poetry that Browning wrote was, notoriously, neither middle-class nor respectable, but that complication did not worry Chesterton. He simply announced:

This mystery of the unconscious man, far deeper than any mystery of the conscious one, existing as it does in all men, existed peculiarly in Browning, because he was a very ordinary and spontaneous man.

Since that characteristically cryptic utterance there have been published in addition to countless romanticized studies of the famous elopement and marriage, some half-dozen full-scale biographies and numerous monographs exploring specific aspects of Browning's life. This mass of biographical writing might seem to condemn Chesterton's views as merely silly, yet another instance of the compulsive epigrammatist being too clever by half. Actually, it does nothing of the sort. There have been discoveries for biographers to make, points of uncertainty to clarify, details to unearth of when or where exactly something happened, but few of these revelations have succeeded in making Browning's life more exciting, varied, or indeed comprehensible than it seemed to Chesterton. What attracts biographers to Browning is not the life or the work, but the puzzling discrepancy between the two.

Chesterton was not disturbed by this. He found a satisfactory explanation in his belief that true complexity is not in the overtly simple, a paradox that served to support his and to some extent Browning's, attitude to some extent Browning's religious faith. Others among Browning's near-contemporaries were worried by the paradox. They found it impossible to reconcile the bluff, blustering diner-out who insisted on dominating conversations and went to great lengths to demonstrate that he wasn't a "literary man" with the author of poems which revealed a linguistic originality and depth of psychological analysis that placed him among the greatest of English poets. Henry James expressed his bewilderment in a short story "The Private Life" in which the central character, based on Browning, literally splits himself in two—his "bourgeois" half chafes happily with dinner guests while, at the same time, his ghostly "genius" sits upstairs writing. This image of the two Brownings recurs in memoirs of those who knew him and dominates modern biographical studies.

In Robert Browning: a life within life, Donald Thomas quotes a representative, though less familiar, example of this attitude. Mary Gladstone recorded in her diary meeting Browning at dinner:

He talks everybody down with his dreadful voice, and always places his person in such disagreeable proximity with yours and puffs and blows and spits in your face. I tried to think of Abi Vogler but it was of no use—he couldn't ever have written it. When she confided her distress to Burne-Jones he assured her that Browning's outside was "moss" and the poetry his "real self". Dr Thomas's own view of the "two

Brownings" theory is never made quite clear. He describes it as a "myth" and that the real Browning is to be found in the poetry. But this is to restate a similar theory. Dr Thomas makes no attempt to conceal the less attractive sides of Browning's personality—indeed they are probably emphasized more strongly here than usual—and he does not allow while Browning's poetry was capable of inspiring endless discussion, "of his life, considered as a narrative of facts, there is little or nothing to say". For Chesterton, Browning was a highly conventional man who at one great moment in his life—the elopement with Elizabeth Barrett—acted with breathtaking unconventionality and then reverted to fairly staid, middle-class respectability. The poetry that Browning wrote was, notoriously, neither middle-class nor respectable, but that complication did not worry Chesterton. He simply announced:

This mystery of the unconscious man, far deeper than any mystery of the conscious one, existing as it does in all men, existed peculiarly in Browning, because he was a very ordinary and spontaneous man. Since that characteristically cryptic utterance there have been published in addition to countless romanticized studies of the famous elopement and marriage, some half-dozen full-scale biographies and numerous monographs exploring specific aspects of Browning's life. This mass of biographical writing might seem to condemn Chesterton's views as merely silly, yet another instance of the compulsive epigrammatist being too clever by half. Actually, it does nothing of the sort. There have been discoveries for biographers to make, points of uncertainty to clarify, details to unearth of when or where exactly something happened, but few of these revelations have succeeded in making Browning's life more exciting, varied, or indeed comprehensible than it seemed to Chesterton. What attracts biographers to Browning is not the life or the work, but the puzzling discrepancy between the two.

To apply the concept of a "life within life" to Browning it is necessary to give a new kind of emphasis to his relationship with Elizabeth Barrett. It has been claimed previously by debunking biographers that the influence exerted by Elizabeth was detrimental to Browning's growth as a poet. Dr Thomas avoids such foolishness: his sympathetic treatment of the marriage is one of the most successful parts of the book. Where he differs from most biographers is in seeing Browning's married life as a sort of psychological interregnum. This is not to underestimate the enormous importance of Elizabeth to Browning, in reality when alive and as an object of veneration after her death; it is merely to insist that when placed in the context of the full pattern of Browning's life, this influence appears as a kind of discontinuity with what came before and what came after. It is here that Adler's theory is most successfully applied.

Browning lived with his parents in South London until he was 34 years old, and he was regarded even then as a mysteriously private person. As Leigh Hunt wittily remarked, "Browning lives at Peckham because no one else does!" His earliest poetry was introspective and confessional, though he was also ambitious to make his name as a popular dramatist. As far as public acclaim was concerned he failed on both counts. But Dr Thomas's argument runs, roughly, that Browning's "private" life (later called "Roryphyr's" and "Johannes Agricola's in Meditation") were beginning to reveal "certain darker preoccupations". Both of these poems were published originally in the *Monthly Repository* in 1836, the author being given as "Z"; when collected in *Dramatic Lyrics* (1842) they were linked together by the title "Madhouse Cells".

What is being claimed is that here already was the fascination with madness, abnormality, violence and neurosis that was to provide the intellectual for many of Browning's later poems. In the last of his side of his character was "hidden, serene, solemnly" from the reading public, hence the rather heavy significance attached to the pseudonymous "Z". It was also to some extent kept hidden from his wife. The poems written during his marriage dealt mainly with themes of religious faith (*Christmas-Eve and Easter-Day*, *Kärstisch*, "Clean") and sexual

love ("Two in the Campagna", "A Lovers' Quarrel", "Love in a Life"). Where the darker, and presumably deeper, poetic mood emerged it was in poems like the nightmarish "Childe Roland to the Dark Tower Came" or, perhaps, hinted at by the slippery Bishop Bloorgram:

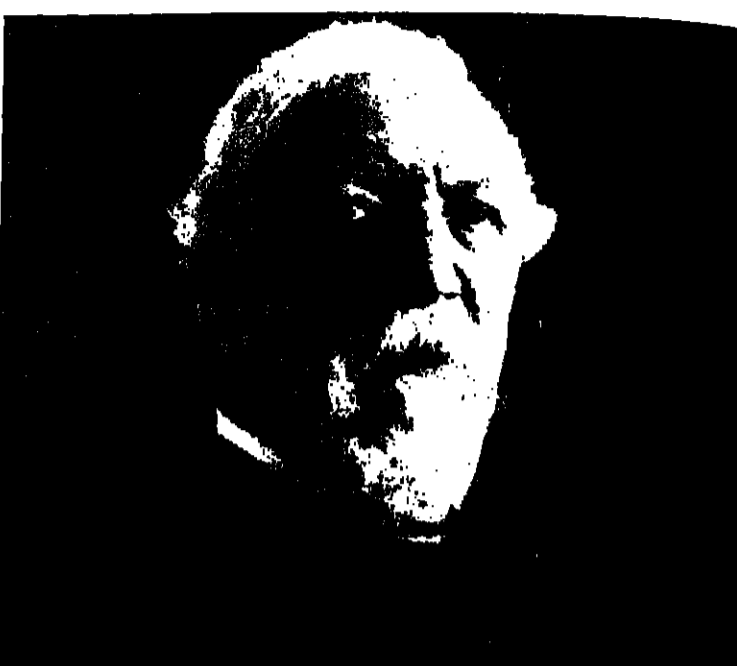
Our interest's on the dangerous edge of things. The honest thief, the tender murderer. The superstitious atheist, demirep That loves and saves her soul in new French books.

In the early days of the marriage Elizabeth often complained that Browning was not devoting enough time to his poetry; he talked of writing "lyrics with more music and painting than before" a step, he hoped, to greater popularity. In part this clearly reflects his happiness at the close relationship with Elizabeth, what Dr Thomas well describes as the "nearly claustrophobic intimacy which pervades his poetry of sexual love in *Men and Women*", but by shifting the emphasis slightly there is also the implication that Browning was holding something of himself back from Elizabeth and garnering his inner self for a new confrontation with horror. When he realized that Elizabeth did not have long to live Browning began to go out more in society, often at Elizabeth's own wish. It seemed as though he was preparing himself for the time when she would no longer be there and poetry would absorb all his attention.

Certainly, by the time of Elizabeth's death in 1861 Browning had already bought the *Old Yellow Book* from a stall in Florence and was contemplating how he should handle the story that was to become *The Ring and the Book*. To one of his later women friends, Julia Wedgwood, Browning admitted that Elizabeth had not shared his "scientific interest in evil" and Julia Wedgwood responded by hinting that Elizabeth would not have approved of the fascination with "morbid anatomy" displayed in *The Ring and the Book*: It is a judgment seconded by Donald Thomas.

It is also certainly true that from *Dramatic Personae* (the first collection of poems published after Elizabeth's death), through *The Ring and the Book* to works such as *Riffs at the Fair* and *Red Cotton Night-Cap Country*, Browning was to turn with more avidity than ever before to the analysis of the tormented soul. It was a private world that became legendary and allowed late-Victorians like Henry James to portray him as a kind of Jekyll and Hyde of the literary scene. Or, to use Dr Thomas's apt modern terms, Browning had created a "life within life" in which reality was represented by his poetic excurSIONS into criminality and neurosis while, protection from intrusion was provided by the puffing, spitting and blowing in people's faces that so distressed poor Mary Gladstone.

The main objection to the approach adopted in Robert Browning: a life within life, is that it is a psycho-biography of great wit and power (and Donald Thomas is often convincing); it is simply too neat to bear the burden of complete interpretation. It cannot be accepted as inclusive, though it is almost impossible to decide why it should be accepted at one point rather than another. The reader is inevitably left to decide where the argument sounds most convincing, or why more claim that he is right, or wrong, than the biographer himself can. In this particular case, one of the most interesting realizations of Dr Thomas's approach concerns the *Madhouse Cells*. Browning's poems of various kinds which were published in 1836, the author being given as "Z"; when collected in *Dramatic Lyrics* (1842) they were linked together by the title "Madhouse Cells". What is being claimed is that here already was the fascination with madness, abnormality, violence and neurosis that was to provide the intellectual for many of Browning's later poems. In the last of his side of his character was "hidden, serene, solemnly" from the reading public, hence the rather heavy significance attached to the pseudonymous "Z". It was also to some extent kept hidden from his wife. The poems written during his marriage dealt mainly with themes of religious faith (*Christmas-Eve and Easter-Day*, *Kärstisch*, "Clean") and sexual



Robert Browning, photographed in 1889, the year of his death.

very close and to Lady Louisa Ashburton he did propose, assuring her that the marriage would be for the sake of his son, his own heart being buried with Elizabeth in Florence.

Apart from Lady Ashburton, there were notably Julia Wedgwood, Isabella ("Isa") Blagden, and Annie Egerton Smith. It is an important part of Dr Thomas's interpretation that when Browning returned from Italy to London, determined to immerse himself in a private poetic world, the memory of Elizabeth became enshrined as a crucial part of that privacy. The gawky proposal to Lady Ashburton, her rejection, and Browning's subsequent hostility towards her can be easily explained in these terms. Annie Egerton Smith died suddenly on holiday with Browning and his sister Sarrianna; experience reawakened memories of Elizabeth's death and moved Browning to write one of his most important religious poems "La Salsiz"; Julia Wedgwood broke the agreement that their relationship was to be one of friendship only, and was dismissed. Isa Blagden who had known both Brownings in Italy became the recipient of letters from Browning which were often surprisingly frank and coarse. In all of these relationships Dr Thomas sees Browning as indulging dangerously in using the idealized memory of Elizabeth to prevent the play from being too serious, that these games were often conducted through correspondence reinforced the idea of the literary life hidden within a public shell.

Where the argument of Robert Browning: a life within life is less convincing is in the evidence drawn from the poetry. It is undeniable that Browning was attracted to themes of murder and mental instability and that this concern increased in the later works. Dr Thomas's call for attention to be given to those poems is welcome. But if we accept this strain of Browning's work as the real one, then it is hard to see what to do about the many poems which do not fit into the pattern. Are "Fra Lippo Lippi" and poems because they are not really neurotic case studies and were written during his marriage?

Related to this is the problem that has long bedevilled Browning studies to which Dr Thomas gives insufficient attention. It may be that the early "Madhouse Cells" poems represent a suppressed, true side of Browning's personality, but he also never attained a wholly and with any certainty any state which would be the point, that he was a different man and behaviour was not his own. They were, he said, again and again, the same old view of behaviour

Dr Thomas, of course, doesn't say that they are: simply that Browning was fascinated by them. But, if the poetry is to be used to offer an interpretation of the life, then how can one distinguish between those poems which have a biographical significance and those which do not?

Genuine difficulties of interpretation are involved in this, they are hardly eased by Browning's own awareness of them. Early in his correspondence with Elizabeth Smith he told her: "You speak of me as only make man and woman speak, give you truth broken into pieces, and fear the pure white light, even if it is in me, but I am going to try." It is a strange, humble moment Browning admitting that he can "only" make man and woman speak, only in effect, create some of the most exciting and mystifying dramatic poems in the language. That he is going to try to speak out in his own voice heightens perhaps the influence Elizabeth had on him, and it is likely that *Christmas-Eve and Easter-Day* and the poem in which the poet, however, Browning was not, however, to surrender the dramatic method he was to continue to expand in poetic possibilities.

Whatever the temptations, it is not really necessary to attach too deep or deep a biographical meaning to this process, or even to argue that there was a rather sinister, suppressed personal urge that drove Browning into a poetic world of abnormality. There is a more straightforward explanation and once again Chesterton is the best spokesman for it. Like many Victorian readers, Chesterton realized that Browning's fascination with the "grotesque" was a perfectly healthy sign. To portray the morally healthy into grotesque "truth" was the only way to, to celebrate the undeniable perfection of God. For Browning, to write otherwise would have meant being untrue to the religious faith that pervades his work.

Chesterton, as usual, searched for an appropriate paradox to express his admiration for the totality of Browning's religious belief. He wrote Chesterton writes "a kind of comic detective who walked into the kitchen of thieves' kitchens and accused them of public virtue." That may not be a very fashionable approach to the problem, but it does offer a way of believing that there was one like rather than two: Donald Thomas's biography is intelligent and suggestive as it is—drives the two Brownings even further apart.

Peter Keating is reader in English literature at the University of Edinburgh.

BOOKS

What to expect

Money and Inflation by Frank Hahn Blackwell, £7.95 ISBN 0 631 12917 0

The rise of rational expectations (RE) theory and the associated rehabilitation of many of the propositions of classical economics has been an astonishingly unchallenged one. A recent review in the *Economic Journal* by an eminent "mainstream" economist calmly asserted that "RE interpreted as an intellectual research programme... is the most exciting thing that has happened to theoretical macroeconomics in our day". "Keynesian" economists have generally chosen to keep a low profile, disquieted only about the nature of disequilibrium but not directly challenging the RE theorists about equilibrium propositions.

The core of *Money and Inflation* is devoted to confronting head-on some of the recent RE theory on its own equilibrium ground. For example, Professor Hahn shows that "a claim that agents know for sure what the behaviour of the total money stock will be, the real equilibrium of the economy will be invariant to this behaviour, is false". And he suggests that "there is no [RE] theory of the actions of agents that explains how prices come to be such as to clear Walrasian markets. It is an article of faith that they always do so."

The book is based on three Mutual lectures given in the University of Birmingham last year. Reader beware, however: the argument is highly abstract and needs to be followed closely. The first chapter is concerned with the foundations of monetary theory. Hahn uses an overlapping generations model to produce a number of odd results when RE are introduced. These include a demonstration that a world is possible in which inflation occurs with a constant money stock. He comments, "Next time you read, probably in a letter to *The Times*, that 'a necessary and sufficient condition for inflation is an increasing stock of money', I hope you will remember this simple result." His more general purpose is to show that it is a fundamental mistake to assume that barter and monetary economies can be treated as if they were directly comparable. A caricature of the conclusion is "If money did not exist, it would be necessary to invent it."

Chapter two is concerned wholly with a monetary economy and in particular with the world of R.E. Lucas (whose work is contrasted with that of Patrick Minford and others) who use "three or four log-linear approximations plucked from a microeconomic textbook and aggregated by faith and determination". Hahn's comments on Lucas's 1972 *Journal of Economic Theory* paper that "it is splendid because it brilliantly illuminates an important theoretical point. It is also disastrous, both to Lucas himself and to others, because it has led him and them to believe that this was the only point in need of illumination." This point was that unexpected monetary shocks could interfere with the information-revealing function of prices, and so have "real" effects. The mistake, to put it crudely, was to suppose that it followed that expected money changes could not have "real" effects. This latter assertion can only be based on the impossibility of involuntarily unemployed resources; an impossibility which is so merely by definition in the Lucasian world. Aphorism and argument are interwoven in Hahn's elegant exposition. Time is a device that stops everything happening at once; "Much importance is attached to changes; their anything goes." Hahn readily admits that various "Keynesian" propositions are poorly founded in pure theory but he is insistent that quantities as well as price signals and expectations have a central role to play in macro theory.

The final chapter, on inflation, in some respects replaces the razor of the earlier chapters with a much blunter weapon. The aphorisms continue: the monetarist story of how money expansion can temporarily increase employment implies that the government "will be lying through its teeth and will continually be discovered to be doing so"; Friedman's account of the Walrasian "grinding out" of the natural rate of unemployment equilibrium fails because "neither he nor anyone else has yet done the grinding, and the definition is vacuous and so non-operational". Again, Hahn's argument is essentially that a purely inflationary outcome of monetary expansion is one, but not the only, logical possibility. This is crucial for policy, because it is the constant assertion that inflation is the only possibility that has come to dominate policy-making.

It will, I hope, be clear that this is an entertaining and provocative book though by no means an easy one. Its great value is that it takes a cool look at the theoretical foundations of monetarism—a welcome change from the often ill thought-out invective associated with "Keynesian" responses. Above all, it is a convincing plea for "Keynesians" to put much more effort into constructing the theoretical foundations of what Hahn wants to remain a (perhaps the) valid mode of economic perception.

Whatever Happened to Britain? attempts a more difficult task than the *Agenda* books, namely to explain some of the complexities of economic policy to the general public. Through the current recession is the immediate subject, it is related to long-term factors of our economic malaise. The statistics are inventively selected to illustrate a few outstanding developments, like changes in world trade and the pace of inflation. John Eatwell also discusses economists' ideas about the problems and their solution in a historical context. His introduction to Keynes's ideas goes as far back as Colbert and List, to demonstrate different views of the role of the state in the economy, and contrast those ideas with laissez faire economics (of English origin) against which Keynes and his successors were pitting themselves.

The problems presented, of cumulative industrial decline, of relative loss of trade, of continuing inflation, and of finding a proper role for state intervention in the economy are those at the heart of economic policy controversy, and they are presented in a provocative way. Less advanced students, and non-economists could well begin economic policy discussion from such a basis, and there are plenty of clues in the book for guidance further into economics. The references are few, and as much to economic history as to economics; but further exploration is provided for.

M. J. C. Surrey

M. J. C. Surrey is professor of economics at the University of Leeds.

Guided tours

Agenda for Britain volume one: Micro Policy Choices for the 80s volume two: Macro Policy Choices for the 80s edited by C. D. Cohen Philip Allan, £14.00 and £6.95 (volume one); £10.00 and £4.95 (volume two) ISBN 0 86003 034 2 and 132 2; 0 86003 041 5 and 138 1

Whatever Happened to Britain? The economics of decline by John Eatwell Duckworth/BBC, £9.95 and £4.95 ISBN 0 7156 1643 9 and 1639 0 ISBN 0 563 16545 6 and 16544 8

Books on economic policy pose some special problems for authors as the potential readership is likely to be much wider than just professional economists. Not all politics students, for example, will have any knowledge of economics, and there may be others, including beginners at economics who want to discuss policy questions on the basis of little formal economics. *Agenda for Britain*, however, is directed more towards economists interested in policy, or politicians with some expertise in economics or a particular field of economic policy; while *Whatever Happened to Britain?* is specifically aimed at non-economists, as it is the book accompanying the BBC television series of the same name.

The *Agenda* books do not bear out others, because it has led him and them to believe that this was the only point in need of illumination." This point was that unexpected monetary shocks could interfere with the information-revealing function of prices, and so have "real" effects. The mistake, to put it crudely, was to suppose that it followed that expected money changes could not have "real" effects. This latter assertion can only be based on the impossibility of involuntarily unemployed resources; an impossibility which is so merely by definition in the Lucasian world. Aphorism and argument are interwoven in Hahn's elegant exposition. Time is a device that stops everything happening at once; "Much importance is attached to changes; their anything goes." Hahn readily admits that various "Keynesian" propositions are poorly founded in pure theory but he is insistent that quantities as well as price signals and expectations have a central role to play in macro theory.

The Economic and Social Development of Merseyside by Sheila Marriner Croom Helm, £12.95 ISBN 0 7099 0260 3

Dr Sheila Marriner's long experience at Liverpool University has given her an almost unrivalled knowledge of Merseyside's economic development over the past two or three centuries. This knowledge she has now distilled into a comprehensive survey, including not only the fruits of her own research but also those of many other scholars who have made more specialized studies of the commercial, industrial and social life of the Merseyside region. This region extends from Liverpool in the west to Warrington in the east, and from the Wigan coalfield in the north to the Cheshire saltfield in the south. It includes a remarkable complex of trade and industry, centred on Liverpool. Yet Lancashire has so often been portrayed in terms of the cotton industry that it is not

generally appreciated what a contrast Merseyside presents to the eastern area of the country centred on Manchester. At the same time, Merseyside's development was undoubtedly associated very closely with the demands of cotton manufacturing—not only for raw cotton imports and export markets, giving rise to the shipping and shipbuilding industries, but also for coal, chemicals and engineering products. Dr Marriner emphasizes how these developments were based on the region's locational and geological advantages. The River Mersey provided the transport artery, with its Weaver and Irwell tributaries, which were improved by early river navigation schemes and then supplemented by artificial canals such as the Sankley, Bridgewater, and Liverpool-Leeds canals, to which the Manchester Ship Canal was subsequently added. Liverpool also played a leading role in early railway development, from the Liverpool-Manchester line of 1830 onwards. These transport developments opened up the St Helens and Wigan coalfields and the Cheshire saltfield, so that coal and salt formed the basis for the growth of the region's chemical and allied industries, centred in such towns as St Helens, Widnes and Runcorn, and linked to the cotton-manufacturing towns of east Lancashire. Thus Merseyside became by far the most important area in Britain of the "alkali" or heavy chemical industry.

Along with these industries, south-west Lancashire also developed varied metal manufactures, ranging from small products such as watches and files to copper-smelting and the heavy engineering, located in Liverpool, Preacet, St Helens and Warrington, while iron steamship building ultimately concentrated in Birkenhead. The area never developed any significant cotton industry, however, though linen and sailcloth manufactures were originally important. With all these developments in transport, trade and industry, Liverpool became a great international port and commercial centre, dominating the Atlantic trade. Its Cotton Exchange, its brokers, shippers, forwarding agents, insurance and other services formed the basis of the city's commercial life, which the researches of the late Professor F. E. Hyde and of Dr Marriner herself have done so much to illuminate. More recently she has investigated housing and other aspects of social life on Merseyside, which are also included in this all-embracing survey. Liverpool and its region, indeed, have become as notorious for their socio-cultural features as for their economic activities. It is, in fact, the decline in those activities that has created and highlighted the social problems, though, as Dr Marriner shows, these have perhaps been exaggerated.

Merseyside has undoubtedly suffered from the general decline since the First World War in Britain's cotton, shipping, shipbuilding and other basic industries, on which the economic growth and prosperity of the nineteenth century were based, while more recently there have also been problems even in newer industries such as motor-car and rubber manufactures. Dr Marriner discusses the efforts by both national and local governments to deal with these problems. Her book is both comprehensive and compressed, covering a wide range of activities, both economic and social, over a long period, from the pre-industrial revolution era to the present day. It often tends to become a potted summary of more specialized studies, sometimes reading almost like a trades directory or socio-topographical guide, but it displays a remarkable grasp of the varied and interrelated aspects of Merseyside's history, and though much of it is familiar to those who already know something of particular topics, it nevertheless provides in its totality an unprecedentedly comprehensive study of the region.

A. E. Musson
A. E. Musson is professor of economic history at the University of Manchester.

The problems presented, of cumulative industrial decline, of relative loss of trade, of continuing inflation, and of finding a proper role for state intervention in the economy are those at the heart of economic policy controversy, and they are presented in a provocative way. Less advanced students, and non-economists could well begin economic policy discussion from such a basis, and there are plenty of clues in the book for guidance further into economics. The references are few, and as much to economic history as to economics; but further exploration is provided for.

Joan Mitchell
Joan Mitchell is professor of economics at the University of Nottingham.

Trade, transport, industry

The Economic and Social Development of Merseyside by Sheila Marriner Croom Helm, £12.95 ISBN 0 7099 0260 3

Dr Sheila Marriner's long experience at Liverpool University has given her an almost unrivalled knowledge of Merseyside's economic development over the past two or three centuries. This knowledge she has now distilled into a comprehensive survey, including not only the fruits of her own research but also those of many other scholars who have made more specialized studies of the commercial, industrial and social life of the Merseyside region. This region extends from Liverpool in the west to Warrington in the east, and from the Wigan coalfield in the north to the Cheshire saltfield in the south. It includes a remarkable complex of trade and industry, centred on Liverpool. Yet Lancashire has so often been portrayed in terms of the cotton industry that it is not

generally appreciated what a contrast Merseyside presents to the eastern area of the country centred on Manchester. At the same time, Merseyside's development was undoubtedly associated very closely with the demands of cotton manufacturing—not only for raw cotton imports and export markets, giving rise to the shipping and shipbuilding industries, but also for coal, chemicals and engineering products. Dr Marriner emphasizes how these developments were based on the region's locational and geological advantages. The River Mersey provided the transport artery, with its Weaver and Irwell tributaries, which were improved by early river navigation schemes and then supplemented by artificial canals such as the Sankley, Bridgewater, and Liverpool-Leeds canals, to which the Manchester Ship Canal was subsequently added. Liverpool also played a leading role in early railway development, from the Liverpool-Manchester line of 1830 onwards. These transport developments opened up the St Helens and Wigan coalfields and the Cheshire saltfield, so that coal and salt formed the basis for the growth of the region's chemical and allied industries, centred in such towns as St Helens, Widnes and Runcorn, and linked to the cotton-manufacturing towns of east Lancashire. Thus Merseyside became by far the most important area in Britain of the "alkali" or heavy chemical industry.

generally appreciated what a contrast Merseyside presents to the eastern area of the country centred on Manchester. At the same time, Merseyside's development was undoubtedly associated very closely with the demands of cotton manufacturing—not only for raw cotton imports and export markets, giving rise to the shipping and shipbuilding industries, but also for coal, chemicals and engineering products. Dr Marriner emphasizes how these developments were based on the region's locational and geological advantages. The River Mersey provided the transport artery, with its Weaver and Irwell tributaries, which were improved by early river navigation schemes and then supplemented by artificial canals such as the Sankley, Bridgewater, and Liverpool-Leeds canals, to which the Manchester Ship Canal was subsequently added. Liverpool also played a leading role in early railway development, from the Liverpool-Manchester line of 1830 onwards. These transport developments opened up the St Helens and Wigan coalfields and the Cheshire saltfield, so that coal and salt formed the basis for the growth of the region's chemical and allied industries, centred in such towns as St Helens, Widnes and Runcorn, and linked to the cotton-manufacturing towns of east Lancashire. Thus Merseyside became by far the most important area in Britain of the "alkali" or heavy chemical industry.

Along with these industries, south-west Lancashire also developed varied metal manufactures, ranging from small products such as watches and files to copper-smelting and the heavy engineering, located in Liverpool, Preacet, St Helens and Warrington, while iron steamship building ultimately concentrated in Birkenhead. The area never developed any significant cotton industry, however, though linen and sailcloth manufactures were originally important. With all these developments in transport, trade and industry, Liverpool became a great international port and commercial centre, dominating the Atlantic trade. Its Cotton Exchange, its brokers, shippers, forwarding agents, insurance and other services formed the basis of the city's commercial life, which the researches of the late Professor F. E. Hyde and of Dr Marriner herself have done so much to illuminate. More recently she has investigated housing and other aspects of social life on Merseyside, which are also included in this all-embracing survey. Liverpool and its region, indeed, have become as notorious for their socio-cultural features as for their economic activities. It is, in fact, the decline in those activities that has created and highlighted the social problems, though, as Dr Marriner shows, these have perhaps been exaggerated.

Merseyside has undoubtedly suffered from the general decline since the First World War in Britain's cotton, shipping, shipbuilding and other basic industries, on which the economic growth and prosperity of the nineteenth century were based, while more recently there have also been problems even in newer industries such as motor-car and rubber manufactures. Dr Marriner discusses the efforts by both national and local governments to deal with these problems. Her book is both comprehensive and compressed, covering a wide range of activities, both economic and social, over a long period, from the pre-industrial revolution era to the present day. It often tends to become a potted summary of more specialized studies, sometimes reading almost like a trades directory or socio-topographical guide, but it displays a remarkable grasp of the varied and interrelated aspects of Merseyside's history, and though much of it is familiar to those who already know something of particular topics, it nevertheless provides in its totality an unprecedentedly comprehensive study of the region.

A. E. Musson
A. E. Musson is professor of economic history at the University of Manchester.

The problems presented, of cumulative industrial decline, of relative loss of trade, of continuing inflation, and of finding a proper role for state intervention in the economy are those at the heart of economic policy controversy, and they are presented in a provocative way. Less advanced students, and non-economists could well begin economic policy discussion from such a basis, and there are plenty of clues in the book for guidance further into economics. The references are few, and as much to economic history as to economics; but further exploration is provided for.

Joan Mitchell
Joan Mitchell is professor of economics at the University of Nottingham.

Trade, transport, industry

The Economic and Social Development of Merseyside by Sheila Marriner Croom Helm, £12.95 ISBN 0 7099 0260 3

Dr Sheila Marriner's long experience at Liverpool University has given her an almost unrivalled knowledge of Merseyside's economic development over the past two or three centuries. This knowledge she has now distilled into a comprehensive survey, including not only the fruits of her own research but also those of many other scholars who have made more specialized studies of the commercial, industrial and social life of the Merseyside region. This region extends from Liverpool in the west to Warrington in the east, and from the Wigan coalfield in the north to the Cheshire saltfield in the south. It includes a remarkable complex of trade and industry, centred on Liverpool. Yet Lancashire has so often been portrayed in terms of the cotton industry that it is not

generally appreciated what a contrast Merseyside presents to the eastern area of the country centred on Manchester. At the same time, Merseyside's development was undoubtedly associated very closely with the demands of cotton manufacturing—not only for raw cotton imports and export markets, giving rise to the shipping and shipbuilding industries, but also for coal, chemicals and engineering products. Dr Marriner emphasizes how these developments were based on the region's locational and geological advantages. The River Mersey provided the transport artery, with its Weaver and Irwell tributaries, which were improved by early river navigation schemes and then supplemented by artificial canals such as the Sankley, Bridgewater, and Liverpool-Leeds canals, to which the Manchester Ship Canal was subsequently added. Liverpool also played a leading role in early railway development, from the Liverpool-Manchester line of 1830 onwards. These transport developments opened up the St Helens and Wigan coalfields and the Cheshire saltfield, so that coal and salt formed the basis for the growth of the region's chemical and allied industries, centred in such towns as St Helens, Widnes and Runcorn, and linked to the cotton-manufacturing towns of east Lancashire. Thus Merseyside became by far the most important area in Britain of the "alkali" or heavy chemical industry.

TLS

THE TIMES LITERARY SUPPLEMENT

Important news for New Subscribers

New subscribers to The Times Literary Supplement can now take advantage of our special introductory rate of £25.00* for a year's issues—even cheaper than buying it from your newsagent. Simply complete the coupon below and our computerised subscription service will process your order at once. *Offer applies to new subscribers in the UK only.

Please send me The Times Literary Supplement for one year. Enclose my cheque for £25.00 made payable to Times Newspapers Ltd.

Please print NAME _____ ADDRESS _____

Signature _____ Date _____

Mail this coupon with your cheque to Times Newspapers Limited, Supplements Subscription Manager, Oakfield House, 35 Perrymount Road, Haywards Heath, West Sussex RH16 3DH.

Overseas subscribers should write for information to the address above L50

BOOKS

Classical tradition

Blood for the Ghosts: classical influences in the nineteenth and twentieth centuries
by Hugh Lloyd-Jones
Duckworth, £24.00
ISBN 0 7156 1501 9

Classical Survivals: the classics in the modern world
by Hugh Lloyd-Jones
Duckworth, £18.00
ISBN 0 7156 1517 3

"Blood for the Ghosts" is not Bram Stoker's image, but Homer's, and it refers here to the reanimation of the classical past through the present. The 25 pieces collected in this volume, most of them previously published, include lectures, articles, reviews, obituaries, and introductions to works by others; nearly all are in the shape of biographical sketches, a form of which the author, Regius Professor of Greek at the University of Oxford, is a master.

Approximately half of the essays are appreciations of lately deceased classical scholars, such as Gilbert Murray, Eduard Fraenkel, Rudolf Pfeiffer, Maurice Bowra, and E. R.ieu; most of these were associated with Oxford, and several were personal friends of the author. The remaining studies cover a wide range of European writers, from Goethe and Humboldt to Leopardi, Marx, and Burckhardt, and display a formidable knowledge of European literature. The unifying factor is these writers' debt to classical culture. But the unity is a loose one, since the classical element is peripheral in several cases (Coleridge, Marx, Max Müller). With the possible exception of a fairly technical essay on Tycho (son of the famous Ulrich) von Wlanowitz Moellendorf, all items are accessible to non-specialists. One of the most substantial pieces is a survey of Gladstone's Homeric studies and their place in his life's work.

The main defect of this volume is a certain repetitiveness. Since most contributions originally appeared separately, they often contain the same background information, essential for a general audience, on the history of classical scholarship and of the Oxford system; such repetition could well have been reduced in the collected edition by a greater use of cross-references.

Classical Survivals contains a selection of Professor Lloyd-Jones's many reviews, mostly of important books, and a few independent articles. These pieces are shorter, and overlap less with each other than those in the first volume; they do cover a wider range of subjects. The author's logical and literary breadth is even more conspicuous here, for example in his comments on various translations of classical texts, and on the principles of translation in his review of Steiner's *After Babel*. We are also offered a lively defence of classical education in "The Classics in Britain Today", an excellent introduction to Tacitus as an historian, and an instructive and entertaining article on the Delphic oracle.

Professor Lloyd-Jones's popular writings belong to the genre of academic journalism, of an enlightened and enlightening variety. His approach to scholarship is empirical and pluralistic; he judges it not by its ideological or methodological claims, but by its concrete results, and is sceptical of fashionable orthodoxies: "In some matters it makes sense to talk of method . . . but in others talk of method is merely the refuge of second-rate minds looking for a mechanical procedure that they think will automatically produce results." Such trenchant evaluations abound, and even in obituaries, those concerns are firmly ranked, according to strengths and weaknesses of output and personality, in the hierarchy of international scholarship. With their sharp biographical profiles and rigorous assessments of character, many of the essays have a Plutarchian quality; and there is a Tacitean fla-

vor about such lapidary and sententious pronouncements; this comment on postwar Britain: "the ignorant, invested with power at the demand of liberals in the name of justice, used it to oppress civilized people and discourage civilized behaviour."

Professor Lloyd-Jones certainly does not conceal his political opinions: "I am a Conservative, with very little belief in the intrinsic goodness of human nature." One is at times reminded of another classicist and Welshman who, unlike the author, opted for active politics. Like Enoch Powell, Lloyd-Jones cherishes the tragic vision of the Greeks, their

Writing off Homer

The Literate Revolution in Greece and Its Cultural Consequences
by Eric A. Havelock
Princeton University Press, £18.95 and £6.70
ISBN 0 691 09396 2 and 09026 3

In this book Professor Havelock collects 13 of his essays on the theme of the coming of literacy to Greece, all but one of which are intelligible to the Greekless reader.

Havelock's view is that scholars have greatly underestimated the significance of the transition from non-literate to literate society in Greece. The invention of the Greek alphabet was the decisive event in the intellectual history of the world: previous "alphabets" were in reality only "syllabaries", which, like Hebrew with its absence of vowels, left so much to the reader to interpret that the societies using them could never really grow out of the "oral" stage.

The Greeks were the only people to invent an alphabet which met four conditions: an exhaustive coverage of linguistic sound; freedom from ambiguity; a small number of shapes; and suitability for being taught to the young. At first Greek society was not literate in the full sense, and indeed it became so only at the end of fifth century BC; this means that not only Homer but also Pre-Socratic philosophy and Attic tragedy were essentially "oral", not "literate" productions. The eventual change to literacy was momentous; the Greek alphabet and the literacy it made possible are the vital preconditions of both conceptual thought and modern science.

This view of Greek history and literacy has some striking consequences. Havelock exaggerates the reluctance of classicists to accept that Greece can ever have been non-literate; like other points in the rather repetitive opening essays of this book, that one comes round too often. But his view of Homer really is controversial, based as it is on his contention that in the absence of literacy a society needs to embody its "code" of norms and rules in a "tribal encyclopaedia", and on his belief that the Homeric poems played such a role for Greece. Poetry, or as Havelock prefers to call it "poetized speech", existed for "the oral documentation" of a non-literate culture, containing striking examples of the disastrous nature of strife, correct behaviour and even procedures for launching a ship or settling a law case. The narrative thread of the epics is therefore of secondary significance, a mnemonic device; "the entertainment provided in the stories told in the *Iliad* and *Odyssey* was like a spell woven to clothe a running report upon the *mores* and *ethos* of the Greek maritime complex".

The works of the Pre-Socratics, too, were meant "not to be read but heard and memorized"; and are more concerned with language and less with the world than has been thought. Tragedy was "designed as a storage mechanism for the oral re-enactment and consolidation of the *mores* of an essentially pre-literate society". As for history, "the true parent of history was not any one 'writer' like Herodotus, but the alphabet itself".

Havelock surely exaggerates his points. The biblical stories of Saul and David and Solomon, for instance, are not radically more simple and "typical" than Homer or Herodotus. Narrative in Homer cannot be relegated to

elitism, and their lack of sentimentalism. "The ancients were . . . free from the sentimental belief in the sanctity of human life that leads so many moderns to preserve and cosset imbeciles and monsters." But he displays little of Powell's romanticism, as can be seen from his sober and qualified tributes to two of the latter's heroes, Nietzsche and Wagner. He cites Sir Karl Popper in support of his view of Marx as an idealist metaphysician in the tradition of Plato, and himself prefers the cautious conservatism of Aristotle.

The style is spiced throughout with wit and irony: "The Pythia is said to have chewed leaves of Apolline bay, and it was suggested that this caused the ecstasy"; but Professor Oesterreich checked large numbers of bay leaves, and found that he was no more inspired than usual. Or again: reading Petronius followed by Bulfinch's *Mythology* is "like starting a meal in the Tour d'Argent and finishing it at London Airport". And there are plenty of quotable aphorisms: "On the whole it remains true that a translation of a poem is either a bad poem or an unfaithful rendering"; "In studying Japanese one is forced to recognize that what one had lazily assumed to be fundamental categories of human thought are merely local habits."

There must, however, be a scheme to every book, and this one begins very much at the beginning, not just with Aristotle but with the priority ascribed by him to plot, among the components of tragedy. This allows the emphasis to fall on situations and the interaction of characters within those situations rather than on individual psychology. Although some readers might prefer more of the latter, what we have here is a reminder that Corneille and Racine were in the first instance playwrights rather than purveyors of ethics, theologians or great tragic visionaries. The scheme also allows a steady progression from the concept of a dramatic subject to the playwright's adaptations of source-material and history; thence to the significance of *voiesemblance*, and the relationship between tragedy and "dramatic effects", which are claimed to be more numerous in Racine than has often been supposed. There follows, still arising from the Aristotelian conception of plot, considerations of that "simplicity" which has so often featured in comparative discussions; and of the incidence of peripety and *peripetia*. The last of these technical discussions concerns the element of trial and judgment, conspicuous in Corneille but present also in Racine; and this introduces a comparison of the use of rhetoric, not as mere ornament but as a revelation of tragic impulses.

Finally, association of ideas brings the author to the chapter on "tragic quality" which the reader is entitled to expect, if only because Corneille has so often been denied a genuine *sens tragique*. Here again Barwell shows, patiently and undogmatically, that the author of *Honoré* cannot possibly be lacking in tragic sensibility, especially when considered against the background of Aristotle's *liber*. But he also makes the point that tragedy may restore as well as disturb the order of the moral universe; and that in this perspective there is a pair common ground between Corneille and Racine than certain obvious dissimilarities might suggest.

This chapter is clearly intended as a climax, but it opens almost apologetically and ends with a question-mark rather than a formal conclusion. This may help to explain why the book as a whole leaves one with mixed feelings. It is certainly the product of impeccable scholarship, of great value to specialists; but, on the other hand, the concentration on aspects of technique seems to circumscribe the subject in such a way as to prevent the author from getting the full value from his own erudition. For example, the point that distinguishes the celebrated actor from lesser contemporaries could be much strengthened by reference to philosophical or psychological considerations which he prefers to leave aside. Similarly, the initial point about characters conceived as interacting in situations (which is supported by an interesting analogy with compositions of Pous-sin) is not developed as much as it might be, especially in the case of Corneille, in whom there are psychological subtleties which bring him nearer to Racine than is sometimes suspected.

In short, this is a good book which might have been even better if its author's scholarly hesitations had not made him over-modest in his undertaking.

J. H. Broome
J. H. Broome is professor of French at the University of Keele.

H. B. Nisbet
H. B. Nisbet is professor of modern languages (German) at the University of Cambridge and fellow of Sidney Sussex College.

Peter Reynolds
Peter Reynolds is a biologist at the University of California Press, £21.50 and £6.75
ISBN 0 520 04294 8 and 04416 19

Although most subsequent authors have been loath to acknowledge any kind of debt, Desmond Morris really established a new genre of popular biological science with his book *The Naked Ape* (1967). A whole stream of books has emerged during the past 15 years, each taking a somewhat different approach to the possible origins of human behaviour and usually drawing heavily on the burgeoning literature dealing with the behaviour of man's closest relatives, the primates.

Whereas the various successors to *The Naked Ape* have usually carried a different story line, only some of them have tried to avoid the identifiable procedural errors it contained (for example, frequent use of "anecdotal evidence"; ethnocentrism; over-reliance on studies of chimps and baboons; inference of similarity of mechanism from mere similarity of form; and so on). At the time of publication of *The Naked Ape*, many biologists felt that Morris had gone far beyond available scientific evidence when the relatively young science of ethology (the comparative study of animal behaviour) had only just begun to make inroads into the realm of human behaviour. It is still debatable whether the harm that was done (in alienating many who subsequently refused to take any kind of ethology seriously) was outweighed by the undoubted benefits of a book that provided a stimulating and readable introduction to a specifically ethological view of human evolution.

Be that as it may, it is clearly appropriate to examine the latest books on this subject to see whether they embody any firm theoretical advances, and whether their authors have heeded the many well-founded criticisms which have been aired in the last 15 years. Two recent additions to the ever-growing list, by Sarah Hrdy and Peter Reynolds, do thankfully show clear signs of improvement.

Sarah Hrdy sets out to examine human behavioural evolution from the perspective of her own nine years of field observations of human langurs (*Presbytis entellus*) in India. The underlying theme of the book is a complex blend of sociobiological theory and mild feminism - complex because many feminists see in sociobiology a vehicle for masculine sexism, as enshrined (for example) in the widespread invocation of some biological basis for male dominance over the female.

Hrdy tries to establish that there is nothing inherently sexist about sociobiological theory. She takes up the oft-repeated (but sadly justified) criticism that most accounts of human evolution, written by male authors, pay scant attention to the female of the species. As she points out, Antoinette Brown Blackwell criticized Darwin's *Descent of Man* in 1875 for precisely this reason, although her criticism went largely unheeded. Accordingly, a major feature of Hrdy's book is a survey of recent information from primate field studies showing that female strategies are just as important as male strategies. Females compete for resources just as males do; even if their competitiveness (and resulting differential reproductive success) is less spectacular and therefore less evident to the casual (or biased) observer.

and it was suggested that this caused the ecstasy"; but Professor Oesterreich checked large numbers of bay leaves, and found that he was no more inspired than usual. Or again: reading Petronius followed by Bulfinch's *Mythology* is "like starting a meal in the Tour d'Argent and finishing it at London Airport". And there are plenty of quotable aphorisms: "On the whole it remains true that a translation of a poem is either a bad poem or an unfaithful rendering"; "In studying Japanese one is forced to recognize that what one had lazily assumed to be fundamental categories of human thought are merely local habits."

There must, however, be a scheme to every book, and this one begins very much at the beginning, not just with Aristotle but with the priority ascribed by him to plot, among the components of tragedy. This allows the emphasis to fall on situations and the interaction of characters within those situations rather than on individual psychology. Although some readers might prefer more of the latter, what we have here is a reminder that Corneille and Racine were in the first instance playwrights rather than purveyors of ethics, theologians or great tragic visionaries. The scheme also allows a steady progression from the concept of a dramatic subject to the playwright's adaptations of source-material and history; thence to the significance of *voiesemblance*, and the relationship between tragedy and "dramatic effects", which are claimed to be more numerous in Racine than has often been supposed. There follows, still arising from the Aristotelian conception of plot, considerations of that "simplicity" which has so often featured in comparative discussions; and of the incidence of peripety and *peripetia*. The last of these technical discussions concerns the element of trial and judgment, conspicuous in Corneille but present also in Racine; and this introduces a comparison of the use of rhetoric, not as mere ornament but as a revelation of tragic impulses.

Finally, association of ideas brings the author to the chapter on "tragic quality" which the reader is entitled to expect, if only because Corneille has so often been denied a genuine *sens tragique*. Here again Barwell shows, patiently and undogmatically, that the author of *Honoré* cannot possibly be lacking in tragic sensibility, especially when considered against the background of Aristotle's *liber*. But he also makes the point that tragedy may restore as well as disturb the order of the moral universe; and that in this perspective there is a pair common ground between Corneille and Racine than certain obvious dissimilarities might suggest.

This chapter is clearly intended as a climax, but it opens almost apologetically and ends with a question-mark rather than a formal conclusion. This may help to explain why the book as a whole leaves one with mixed feelings. It is certainly the product of impeccable scholarship, of great value to specialists; but, on the other hand, the concentration on aspects of technique seems to circumscribe the subject in such a way as to prevent the author from getting the full value from his own erudition. For example, the point that distinguishes the celebrated actor from lesser contemporaries could be much strengthened by reference to philosophical or psychological considerations which he prefers to leave aside. Similarly, the initial point about characters conceived as interacting in situations (which is supported by an interesting analogy with compositions of Pous-sin) is not developed as much as it might be, especially in the case of Corneille, in whom there are psychological subtleties which bring him nearer to Racine than is sometimes suspected.

In short, this is a good book which might have been even better if its author's scholarly hesitations had not made him over-modest in his undertaking.

J. H. Broome
J. H. Broome is professor of French at the University of Keele.

H. B. Nisbet
H. B. Nisbet is professor of modern languages (German) at the University of Cambridge and fellow of Sidney Sussex College.

Peter Reynolds
Peter Reynolds is a biologist at the University of California Press, £21.50 and £6.75
ISBN 0 520 04294 8 and 04416 19

Although most subsequent authors have been loath to acknowledge any kind of debt, Desmond Morris really established a new genre of popular biological science with his book *The Naked Ape* (1967). A whole stream of books has emerged during the past 15 years, each taking a somewhat different approach to the possible origins of human behaviour and usually drawing heavily on the burgeoning literature dealing with the behaviour of man's closest relatives, the primates.

Whereas the various successors to *The Naked Ape* have usually carried a different story line, only some of them have tried to avoid the identifiable procedural errors it contained (for example, frequent use of "anecdotal evidence"; ethnocentrism; over-reliance on studies of chimps and baboons; inference of similarity of mechanism from mere similarity of form; and so on). At the time of publication of *The Naked Ape*, many biologists felt that Morris had gone far beyond available scientific evidence when the relatively young science of ethology (the comparative study of animal behaviour) had only just begun to make inroads into the realm of human behaviour. It is still debatable whether the harm that was done (in alienating many who subsequently refused to take any kind of ethology seriously) was outweighed by the undoubted benefits of a book that provided a stimulating and readable introduction to a specifically ethological view of human evolution.

Be that as it may, it is clearly appropriate to examine the latest books on this subject to see whether they embody any firm theoretical advances, and whether their authors have heeded the many well-founded criticisms which have been aired in the last 15 years. Two recent additions to the ever-growing list, by Sarah Hrdy and Peter Reynolds, do thankfully show clear signs of improvement.

Sarah Hrdy sets out to examine human behavioural evolution from the perspective of her own nine years of field observations of human langurs (*Presbytis entellus*) in India. The underlying theme of the book is a complex blend of sociobiological theory and mild feminism - complex because many feminists see in sociobiology a vehicle for masculine sexism, as enshrined (for example) in the widespread invocation of some biological basis for male dominance over the female.

Hrdy tries to establish that there is nothing inherently sexist about sociobiological theory. She takes up the oft-repeated (but sadly justified) criticism that most accounts of human evolution, written by male authors, pay scant attention to the female of the species. As she points out, Antoinette Brown Blackwell criticized Darwin's *Descent of Man* in 1875 for precisely this reason, although her criticism went largely unheeded. Accordingly, a major feature of Hrdy's book is a survey of recent information from primate field studies showing that female strategies are just as important as male strategies. Females compete for resources just as males do; even if their competitiveness (and resulting differential reproductive success) is less spectacular and therefore less evident to the casual (or biased) observer.

Christopher Miller
Christopher Miller is a safety analyst with British Nuclear Fuels Ltd, Risley.

BOOKS

Our closest relatives

The Woman That Never Evolved
by Sarah Blaffer Hrdy
Harvard University Press, £12.25
ISBN 0 674 95540 4

On the Evolution of Human Behavior: the argument from animals to man
by Peter C. Reynolds
University of California Press, £21.50 and £6.75
ISBN 0 520 04294 8 and 04416 19

Although most subsequent authors have been loath to acknowledge any kind of debt, Desmond Morris really established a new genre of popular biological science with his book *The Naked Ape* (1967). A whole stream of books has emerged during the past 15 years, each taking a somewhat different approach to the possible origins of human behaviour and usually drawing heavily on the burgeoning literature dealing with the behaviour of man's closest relatives, the primates.

Whereas the various successors to *The Naked Ape* have usually carried a different story line, only some of them have tried to avoid the identifiable procedural errors it contained (for example, frequent use of "anecdotal evidence"; ethnocentrism; over-reliance on studies of chimps and baboons; inference of similarity of mechanism from mere similarity of form; and so on). At the time of publication of *The Naked Ape*, many biologists felt that Morris had gone far beyond available scientific evidence when the relatively young science of ethology (the comparative study of animal behaviour) had only just begun to make inroads into the realm of human behaviour. It is still debatable whether the harm that was done (in alienating many who subsequently refused to take any kind of ethology seriously) was outweighed by the undoubted benefits of a book that provided a stimulating and readable introduction to a specifically ethological view of human evolution.

Be that as it may, it is clearly appropriate to examine the latest books on this subject to see whether they embody any firm theoretical advances, and whether their authors have heeded the many well-founded criticisms which have been aired in the last 15 years. Two recent additions to the ever-growing list, by Sarah Hrdy and Peter Reynolds, do thankfully show clear signs of improvement.

Sarah Hrdy sets out to examine human behavioural evolution from the perspective of her own nine years of field observations of human langurs (*Presbytis entellus*) in India. The underlying theme of the book is a complex blend of sociobiological theory and mild feminism - complex because many feminists see in sociobiology a vehicle for masculine sexism, as enshrined (for example) in the widespread invocation of some biological basis for male dominance over the female.

Hrdy tries to establish that there is nothing inherently sexist about sociobiological theory. She takes up the oft-repeated (but sadly justified) criticism that most accounts of human evolution, written by male authors, pay scant attention to the female of the species. As she points out, Antoinette Brown Blackwell criticized Darwin's *Descent of Man* in 1875 for precisely this reason, although her criticism went largely unheeded. Accordingly, a major feature of Hrdy's book is a survey of recent information from primate field studies showing that female strategies are just as important as male strategies. Females compete for resources just as males do; even if their competitiveness (and resulting differential reproductive success) is less spectacular and therefore less evident to the casual (or biased) observer.

Christopher Miller
Christopher Miller is a safety analyst with British Nuclear Fuels Ltd, Risley.

Eric P. Havelock
Eric P. Havelock is professor of classical studies at the University of California Press, £21.50 and £6.75
ISBN 0 520 04294 8 and 04416 19

Although most subsequent authors have been loath to acknowledge any kind of debt, Desmond Morris really established a new genre of popular biological science with his book *The Naked Ape* (1967). A whole stream of books has emerged during the past 15 years, each taking a somewhat different approach to the possible origins of human behaviour and usually drawing heavily on the burgeoning literature dealing with the behaviour of man's closest relatives, the primates.

Whereas the various successors to *The Naked Ape* have usually carried a different story line, only some of them have tried to avoid the identifiable procedural errors it contained (for example, frequent use of "anecdotal evidence"; ethnocentrism; over-reliance on studies of chimps and baboons; inference of similarity of mechanism from mere similarity of form; and so on). At the time of publication of *The Naked Ape*, many biologists felt that Morris had gone far beyond available scientific evidence when the relatively young science of ethology (the comparative study of animal behaviour) had only just begun to make inroads into the realm of human behaviour. It is still debatable whether the harm that was done (in alienating many who subsequently refused to take any kind of ethology seriously) was outweighed by the undoubted benefits of a book that provided a stimulating and readable introduction to a specifically ethological view of human evolution.

Be that as it may, it is clearly appropriate to examine the latest books on this subject to see whether they embody any firm theoretical advances, and whether their authors have heeded the many well-founded criticisms which have been aired in the last 15 years. Two recent additions to the ever-growing list, by Sarah Hrdy and Peter Reynolds, do thankfully show clear signs of improvement.

Sarah Hrdy sets out to examine human behavioural evolution from the perspective of her own nine years of field observations of human langurs (*Presbytis entellus*) in India. The underlying theme of the book is a complex blend of sociobiological theory and mild feminism - complex because many feminists see in sociobiology a vehicle for masculine sexism, as enshrined (for example) in the widespread invocation of some biological basis for male dominance over the female.

Hrdy tries to establish that there is nothing inherently sexist about sociobiological theory. She takes up the oft-repeated (but sadly justified) criticism that most accounts of human evolution, written by male authors, pay scant attention to the female of the species. As she points out, Antoinette Brown Blackwell criticized Darwin's *Descent of Man* in 1875 for precisely this reason, although her criticism went largely unheeded. Accordingly, a major feature of Hrdy's book is a survey of recent information from primate field studies showing that female strategies are just as important as male strategies. Females compete for resources just as males do; even if their competitiveness (and resulting differential reproductive success) is less spectacular and therefore less evident to the casual (or biased) observer.

BOOKS

Pollution guidelines

Principles of Pollution Control
by Francis Sandbach
Longman, £5.95
ISBN 0 582 30042 8

In spite of the exponential growth of the literature on pollution, this monograph is a valuable addition, offering in one volume a comprehensive introduction to the basic issues which currently dominate the environmental debate. In keeping with the aims of the series (Themes in Resource Management), it also provides those already engaged in pollution control with many useful references drawn from a variety of sources.

Like many books on this subject, it devotes most attention to atmospheric pollution and includes the now obligatory narration of the shortcomings of the Alkali Inspectorate as well as some interesting insights into the origins of the Clean Air Acts. Its almost total neglect of noise is unfortunate and perhaps surprising in view of the role this form of pollution will undoubtedly play in decisions on the site of any third airport for London. Its account of the decision-making procedures within the various European environmental agencies will be particularly appreciated by students of many disciplines, as will its reviews of American approaches to pollution control.

However, if as its title would suggest, the book aims to present principles of pollution control, then discussion of such issues as soft energy paths and alternative technology should have been reserved for a separate study. While a desire to safeguard the environment may be one factor in the growth of these strategies, they must be seen primarily as ideological movements and their study is peripheral to the formulation of a set of pollution principles. The legal, political and economic considerations which determine the socially acceptable levels of risk of releasing radioactivity as a result of an accident at a nuclear power plant cannot be compared with those which define limits on authorized discharges of active effluents during normal operations.

Pollution, entailing damage to third parties or a decline in the quality of common property resources like the oceans or the atmosphere, should also have been distinguished from industrial safety and occupational

hygiene; while their statutory controls can be traced to a common origin in the reformist era of the nineteenth century, pollution cannot strictly be said to occur if there is a contract, for instance, between polluter and polluted, which enables redress to be had without recourse to specific pollution controls. While Sandbach's case-study of the asbestos industry does refer to the hazard posed to the public in the vicinity of an asbestos works, this chapter (albeit well researched) is largely concerned with the health dangers to workers and the failures of trades unionists to campaign on their behalf.

Yet even with a conservative interpretation of the term, is an enunciation of pollution control principles possible; or is research into the non-technological aspects of pollution to remain a predominantly empirical exercise, with only occasional resort to vulgar Marxism by way of a theoretical veneer?

The chapter on economic considerations perhaps provides a basis from which some general principles might be drawn. Pollution taxes and the determination of optimal levels of control have been the subject of considerable, and often esoteric, analysis but Sandbach's comparison of control by taxation and by application of standards demands no special expertise and, though based upon observation of actually practised procedures, does lead to generalized conclusions. The celebrated "polluter-pays" principle would, if rigorously applied (and it remains an objective of the European Community Environment Programme), conflict with our hallowed "best practice means" formula or, indeed, with any other system of regulation which does not require the polluter to compensate third parties affected by residual emissions which fall within authorized limits.

However, concentration on the economics of pollution control tends to emphasize "efficiency" at the expense of "equity". For a truly interdisciplinary perspective, perhaps we would do better to borrow from the insights of philosophers (especially John Rawls) when attempting to derive principles by which the social injustice of acts of pollution and environmental degradation should be gauged and commensurate controls and penalties decided.

Christopher Miller
Christopher Miller is a safety analyst with British Nuclear Fuels Ltd, Risley.

Eric P. Havelock
Eric P. Havelock is professor of classical studies at the University of California Press, £21.50 and £6.75
ISBN 0 520 04294 8 and 04416 19

Although most subsequent authors have been loath to acknowledge any kind of debt, Desmond Morris really established a new genre of popular biological science with his book *The Naked Ape* (1967). A whole stream of books has emerged during the past 15 years, each taking a somewhat different approach to the possible origins of human behaviour and usually drawing heavily on the burgeoning literature dealing with the behaviour of man's closest relatives, the primates.

Whereas the various successors to *The Naked Ape* have usually carried a different story line, only some of them have tried to avoid the identifiable procedural errors it contained (for example, frequent use of "anecdotal evidence"; ethnocentrism; over-reliance on studies of chimps and baboons; inference of similarity of mechanism from mere similarity of form; and so on). At the time of publication of *The Naked Ape*, many biologists felt that Morris had gone far beyond available scientific evidence when the relatively young science of ethology (the comparative study of animal behaviour) had only just begun to make inroads into the realm of human behaviour. It is still debatable whether the harm that was done (in alienating many who subsequently refused to take any kind of ethology seriously) was outweighed by the undoubted benefits of a book that provided a stimulating and readable introduction to a specifically ethological view of human evolution.

BOOKS

Global underclass

Down to Earth: environment and human needs
by Eric P. Havelock
Pluto Press, £3.95
ISBN 0 85104 381 2

At Stockholm in 1972 the state of the human environment was examined in minute detail at a conference convened by the United Nations. As background to the meeting the late Barbara Ward, with René Dubos, wrote the widely acclaimed study *Only One Earth*, which drew attention to the problems of sustaining human life on a heavily populated small planet.

Dr Eckholm's work, which carries a foreword by Barbara Ward and was written very much under her influence, is intended as a review of progress which has been made over the past decade in managing environmental affairs. The result is a book which is both interesting and disturbing, although it is also exasperating and somewhat unsatisfactory.

A basic contention of the study is that environmental issues are of greatest importance to the "global underclass", the 800 million people, or nearly one-fifth of humanity, who make up the absolute poor Eckholm paints a grim picture:

Struggling week by week to survive, caught in endless cycles of hunger, illiteracy, exploitation and disease, the absolute poor have no time to worry about global environmental trends. Yet many are forced by circumstances beyond their control to destroy the very resources from which they must scrape their living.

Against this background he goes on to discuss the additional problems which will develop given projected population increases to the end of the century, concluding that humanity will manage, more less, to cope with the quantitative dimensions of the situation, but leaving much to be desired at the qualitative level. Particular emphasis is placed on the connexion between health and the human environment and on the comparatively simple technology needed to improve conditions of living in poorer rural and urban areas.

Two particularly interesting chapters on croplands and wastelands and on deforestation demonstrate the way in which natural resources can be rapidly degraded and lose their productive potential as they suffer

increased pressure of exploitation. Unfortunately, it is at this stage that Eckholm's methodology becomes suspect. To be fair to him he is extremely candid in stating that books in this genre are invariably said to be "long on problems and short on solutions". What is more important, however, is that much of his argument is based on a mass of anecdotal evidence which is never transformed into a quantitative assessment of the dimensions of the environmental problem as it affects food and wood production. Losses of one type or another are continually emphasized, but there is little mention of offsetting gains from soil conservation, irrigation, double and triple cropping under carefully managed regimes, plant breeding and pest control.

This, it must be emphasized, is not an assertion of the reviewer's euphoric optimism, as recent FAO projections show how difficult the position might become. The point simply is that Eckholm provides an impression of undue despondency by what could be regarded as the rather crude propaganda trick of heaping disaster on disaster. The value of the book would have been much improved by less journalism and more science.

To complete his coverage of environmental issues Dr Eckholm includes chapters on threats to the oceans, new dimensions in pollution associated with the spread of toxic chemicals, species destruction, and global atmospheric, in which much is made of the threatened "greenhouse" effect associated with the release of carbon dioxide into the atmosphere. Although all this provides a rich diet to stimulate concern and controversy, the total framework of the book tends to become somewhat diffuse. The reader who has concentrated on the acute difficulties of the global underclass may feel that ecological problems relating to endangered species, and even the threat of some types of pollution, are possibly of somewhat less significance than the human predicament.

G. H. Peters
G. H. Peters is director of the Institute of Agricultural Economics, University of Oxford.

BOOKS

Global underclass

Down to Earth: environment and human needs
by Eric P. Havelock
Pluto Press, £3.95
ISBN 0 85104 381 2

At Stockholm in 1972 the state of the human environment was examined in minute detail at a conference convened by the United Nations. As background to the meeting the late Barbara Ward, with René Dubos, wrote the widely acclaimed study *Only One Earth*, which drew attention to the problems of sustaining human life on a heavily populated small planet.

Dr Eckholm's work, which carries a foreword by Barbara Ward and was written very much under her influence, is intended as a review of progress which has been made over the past decade in managing environmental affairs. The result is a book which is both interesting and disturbing, although it is also exasperating and somewhat unsatisfactory.

A basic contention of the study is that environmental issues are of greatest importance to the "global underclass", the 800 million people, or nearly one-fifth of humanity, who make up the absolute poor Eckholm paints a grim picture:

Struggling week by week to survive, caught in endless cycles of hunger, illiteracy, exploitation and disease, the absolute poor have no time to worry about global environmental trends. Yet many are forced by circumstances beyond their control to destroy the very resources from which they must scrape their living.

Against this background he goes on to discuss the additional problems which will develop given projected population increases to the end of the century, concluding that humanity will manage, more less, to cope with the quantitative dimensions of the situation, but leaving much to be desired at the qualitative level. Particular emphasis is placed on the connexion between health and the human environment and on the comparatively simple technology needed to improve conditions of living in poorer rural and urban areas.

Two particularly interesting chapters on croplands and wastelands and on deforestation demonstrate the way in which natural resources can be rapidly degraded and lose their productive potential as they suffer

increased pressure of exploitation. Unfortunately, it is at this stage that Eckholm's methodology becomes suspect. To be fair to him he is extremely candid in stating that books in this genre are invariably said to be "long on problems and short on solutions". What is more important, however, is that much of his argument is based on a mass of anecdotal evidence which is never transformed into a quantitative assessment of the dimensions of the environmental problem as it affects food and wood production. Losses of one type or another are continually emphasized, but there is little mention of offsetting gains from soil conservation, irrigation, double and triple cropping under carefully managed regimes, plant breeding and pest control.

This, it must be emphasized, is not an assertion of the reviewer's euphoric optimism, as recent FAO projections show how difficult the position might become. The point simply is that Eckholm provides an impression of undue despondency by what could be regarded as the rather crude propaganda trick of heaping disaster on disaster. The value of the book would have been

Colleges of Further Education

HEREFORD & WORCESTER COUNTY COUNCIL Worcester Technical College

HEAD OF DEPARTMENT OF CATERING

Grade IV (£13,491 - £15,117)

Applications are invited from persons with good teaching and industrial experience to continue the development of a department which has predominantly full-time students following craft and technician courses.

Colleges of Higher Education



Digby Stuart, Fribel, Southlands, Whitelands

Courses offered by the Roehampton Institute of Higher Education are in combined studies leading to university first and higher degrees.

LECTEUR/LECTRICE

The Department of Modern Languages seeks a Lecteur/Lectrice for a fixed-term period running until 31 August 1985. Applicant will be expected to have teaching experience, hold a higher degree (at least a maîtrise or its equivalent) and be native speaker of French.

RAILING COLLEGE OF HIGHER EDUCATION

Good Honours Graduate required, as soon as possible, for a fixed-term extension to evaluate the current state of the use of quantitative methods in the use of quantitative methods.

Miscellaneous

LONDON

To be responsible through maintaining and publicity for some 8,000 students p.a. on the range of charitable funds, co-ordinating the activities of the schools and for financial and general administration.

Research and Studentships

Huddersfield Polytechnic

Department of Behavioural Sciences RESEARCH ASSISTANT Ref: R15 Applications are invited from graduates with a good honours degree in social sciences for the post of Research Assistant to work on the main inter-viewing stage of a research project entitled 'The Political Practice and Organisational Structure of Local Business Association'.

BRIGHTON POLYTECHNIC Faculty of Education Studies

RESEARCH ASSISTANT

£4,680-£5,365

To undertake a detailed study of the implications of the Cookcroft Report, 'Mathematics Counts'. Candidates should have a good honours degree and significant experience of teaching mathematics in a primary or secondary school.

LIVERPOOL UNIVERSITY OF

Department of Economic and Business Studies Applications are invited for the post of Research Assistant/Senior Research Assistant in the Department of Economic and Business Studies. The successful candidate will be expected to have a good honours degree in economics or a related discipline and to have worked under the direction of a senior academic in the area of macroeconomic or microeconomic theory.

Courses

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

M.Sc. in Construction

First notice of a new course offered in conjunction with the Construction Industry Training Board and Cement and Concrete Association. A one-year Master's Programme specially devised for graduate engineers and builders involved in major construction work in developing and developed countries.

Loughborough Leicestershire, England

University of Surrey

Advanced Diploma/MSc in Educational Studies

A part-time course open to all who teach or intend to teach in education (further, higher, adult), the professions or industry. Wednesdays 2-9 pm. Commencing October 1982. Also available full-time for one year for overseas students.

Department of Educational Studies

Post Graduate Certificate in the Education of Adults

A full-time University course for all who teach or intend to teach in education (further, higher, adult), the professions or industry. 1 year, commencing October 1982. Also available part-time over 2 years.

LONDON UNIVERSITY OF KING'S COLLEGE

TUTORIAL STUDENTSHIP IN THE DEPARTMENT OF RELIGION Applications are invited for a tutorial post for the year 1982-83. The successful candidate will be expected to have a good honours degree in a relevant discipline and to have worked under the direction of a senior academic in the area of religious studies.

Librarians

BRISTOL POLYTECHNIC LIBRARY

ASSISTANT LIBRARIAN/INFORMATION SCIENTIST (Management Learning) Ref: No 1249 Applications are invited for a part-time temporary post to be responsible for a rapidly developing local and distance education service for teachers in management education. The appointment will be for 1 year from September 1982.

SUBJECT LIBRARIAN (Business & Management) Ref No 1247

Qualified applicants are invited for a temporary post (10 September 1982 to 27 May 1983) to cover a period of Maternity Leave to continue the provision of a library service to the Regional Council and its associated departments and activities.

General Vacancies

EDITORIAL ASSISTANT

Editorial Assistant required by the Institute of Physics to work in its Publishing Division in Bristol. The Publishing Division is an international publisher of a wide range of primary research journals, review journals, professional magazines and books.

Starting salary for A-level candidates: £4,536 p.a. Graduates in Physics, Mathematics or related subjects starting salary £4,880 p.a. Salaries subject to review on 1 October, 1982.

For application form and further information please apply to: Assistant Administrator The Institute of Physics Techno House, Redcliffe Way, Bristol BS1 6NX.

Overseas

NATIONAL UNIVERSITY OF SINGAPORE FACULTY OF MEDICINE DEPARTMENT OF PATHOLOGY

Applications are invited for teaching appointments in the Department of Pathology. Candidates should possess a basic medical degree and relevant higher professional/academic qualifications, together with teaching and research experience.

Senior Lecturer: \$226,850-\$250,000 p.a. Associate Professor: \$166,000-\$180,000 p.a. (SING\$1=\$S3.69 approximately)

The commencing salary is dependent upon the candidate's qualifications, experience, and the level of appointment offered. In addition, appointees with a basic medical degree and relevant higher professional/academic qualifications will be given the option to retain either consultation fees of 60% of their annual gross salary, or a fixed allowance the rates of which are as follows:

Lecturer: \$84,200-\$5,400 p.a. Senior Lecturer: \$99,000 p.a. Associate Professor: \$115,000 p.a.

Staff may be considered for tenure on local terms after the initial 3-year contract. Leave and medical benefits are provided. Under the University's Academic Staff Provident Fund Scheme, the staff member contributes at the present rate of 25% of his monthly gross salary subject to a maximum of \$5800 p.m., and the University contributes 25% of his monthly gross salary. The sum standing to the staff member's credit in the Fund may be withdrawn when he leaves Singapore/Malaysia permanently.

Mr R E Sharma, Director Overseas Office National University of Singapore, 6 Cheong Chuan Street, Singapore 0511, Republic of Singapore. Director of Personnel National University of Singapore, Kent Ridge, Singapore 0511, Republic of Singapore.

UNIVERSITY OF CAPE TOWN

Research Fellowships

The University of Cape Town annually invites applications for Post-Doctoral Research Fellowships to be held at the University. The Fellowships are for a twelve month period and the stipend attached to the Fellowship is R10 000. Successful candidates from abroad will receive an additional travel grant up to a maximum of R1 500. There is no restriction to any particular field of research.

Applications must include full details of the applicant's envisaged research programme in addition to a full curriculum vitae and the names of two referees to whom the University may refer. The position of the University is not to discriminate in the appointment of staff on the grounds of sex, religion, race, colour or national origin. The dates at which the successful candidates will be engaged to take up their duties are flexible and can be changed to suit the special circumstances of the candidate.

There is no closing date, and applications will be considered when received. Applications should be addressed to: The Research Administration, University of Cape Town, Private Bag, Rondebosch 7700, South Africa.

Overseas continued

DARWIN COMMUNITY COLLEGE

As the Darwin Community College is commencing a B.A. programme the following NEW positions are advertised. The positions are permanent but applicants may elect secondment or contract arrangement. Commencement date for these positions is January 1983.

PRINCIPAL LECTURER - ANTHROPOLOGY POSITION NO. GS37

Teaching areas proposed for the next triennium are: general studies in Social Anthropology, Australian Aboriginal Studies, Southeast Asian Studies, and Pacific Studies. Applicants with expertise in these or other areas will be considered. The successful applicant will be expected to provide academic leadership in his/her field, and to contribute generally to courses in social anthropology. Appropriate academic qualifications, experience and publications will be required.

PRINCIPAL LECTURER - CROSS-CULTURAL PSYCHOLOGY POSITION NO. GS42

The successful applicant will be required to teach cross-cultural psychology as part of a B.A. major. Applicants should be prepared to teach in one other area, from: social psychology, personality, developmental psychology or psychometrics. Evidence of cross-cultural research and journal publications, and a willingness to initiate and lead research will be required. Applicants must possess a minimum qualification of M.A./M.Sc.

SENIOR LECTURER GRADE 1 - ENGLISH POSITION NO. GS43

A Senior Lecturer is required who has a strong interest in Commonwealth Literature and who would be prepared to develop and lecture in units relating to India and south Asia or appropriate regional or topical oriented units. Applicant must have tertiary teaching experience, possess a minimum qualification of M.A. and have a demonstrated competence in research.

Salary Range: Principal Lecturer: A\$34,285 p.a. Senior Lecturer Grade 1: A\$28,127-A\$30,116; A\$30,781-A\$32,782 p.a.

In addition to salary a District Allowance of A\$1,986 p.a. (with dependants) or A\$1,122 p.a. (without dependants) is payable. Conditions of Service: A copy of the College's Conditions of Service, together with an Information Statement on the above positions will be forwarded on receipt of applications.

Applications: Written applications, in duplicate, including full personal details, age, qualifications, previous appointments and experience, the names and full addresses of three referees and a phone number where applicants can be contacted should be forwarded to: The Recruitment Officer Darwin Community College PO Box 40146 Casuarina, NT 5792, Australia. Closing date: 2 October, 1982.

CO-ORDINATOR OF DANCE STUDIES

The Western Australian Academy of Performing Arts was established by the Western Australian Government in December 1979 and is under the aegis of the Western Australian College of Advanced Education. The purpose of the academy is to provide professional training for those who seek careers in music, dance, theatre and media.

The dance program consists of the Diploma of Performing Arts (Dance) which is a three year full-time qualification during which the student may specialise as either a performer or a teacher.

DUTIES: Under the direction of the Principal, to teach, administer and co-ordinate dance courses and activities within the academy. To develop and maintain close liaison with community based programs and those agencies involved in dance in Western Australia. To be available as appropriate to participate in professional dance activities within the academy and the wider community.

SALARY AND CONTRACT: The successful applicant will be appointed at the Senior Lecturer level (approx. £18,256-£18,945) and be subject to the Ludecka salary classifications, according to qualifications and experience.

Terms of appointment will be subject to negotiation. Conditions of service are those that exist in the Australian Tertiary Education Sector. Fees, removal and setting-in allowances are available.

For further information and application form, contact The Principal Dr G. Gibbs, Western Australian Academy of Performing Arts, 2 Bradford Street, Mount Lawley 6050, Western Australia, Tel: Perth 271 9311. Closing date for applications is 31 October 1982.

REMINDER

COPY FOR CLASSIFIED ADVERTISEMENTS IN THE T.H.E.S.

SHOULD ARRIVE NOT LATER THAN 10.00 AM MONDAY PRECEDING THE PUBLICATION

UNITED STATES

USA college history professor seeking British teacher. Contact: Dr G. Gibbs, Western Australian Academy of Performing Arts, 2 Bradford Street, Mount Lawley 6050, Western Australia, Tel: Perth 271 9311.

Colleges of Technology

SENIOR LECTURER 'A' IN CONSUMER AFFAIRS

(POST REF. 82/05RR) £11,198 (x3)-£12,388 (Bar) (x4)-£14,078

Applications are invited for the above post which is primarily concerned with the further development of the SHND Course in Consumer and Business Studies. The post also involves responsibility for the work of the College Consumer Advisory Centre. Appropriate opportunities are available for research, consultancy and personal development. Further particulars and application forms are available from: The Secretary and Treasurer (Staffing), at the underlined address, or telephone 041-334 8141, Ext. 27. The closing date for this post is Monday, 20th September, 1982.



Mr R. E. Sharma (Director) NUS Overseas Office 6 Cheong Chuan Street, Singapore 0511, Republic of Singapore. Director of Personnel National University of Singapore, Kent Ridge, Singapore 0511, Republic of Singapore.

Classified Advertisements

To advertise in the

THES

please phone Jane McFarlane on

01-253 3000 extn 232

THE TIMES HIGHER EDUCATION SUPPLEMENT PRIORY HOUSE ST JOHNS LANE LONDON EC1M 4BX

NATIONAL UNIVERSITY OF SINGAPORE FACULTY OF MEDICINE SENIOR TEACHING APPOINTMENT IN DIAGNOSTIC RADIOLOGY

Applications are invited for a senior teaching appointment in the newly established Department of Diagnostic Radiology in the University. Candidates should possess a basic medical degree and relevant higher professional/academic qualifications, together with teaching and research experience. The successful candidate is expected to head the department which eventually will have an establishment of five academic staff. He is likely to be appointed at Professor or Associate Professor level, depending on qualifications, seniority and experience.

Gross annual emoluments range as follows: Associate Professor: S\$85,000-94,900 Professor: S\$95,100-112,450/118,350-131,950 (Sig. 21 = S\$3.73 approx.)

The commencing salary is dependent upon the candidate's qualifications, experience, and the level of appointment offered. In addition, an appointee with a basic medical degree and relevant higher professional/academic qualifications will be given the option to retain either consultation fees up to 60% of his gross annual emoluments or a fixed medical allowance, the rates of which are as follows:

Associate Professor: S\$15,000 p.a. Professor: S\$24,000/\$3,000 p.a.

Leave and medical benefits are provided. Under the University's Academic Staff Provident Fund Scheme, the staff member contributes at the present rate of 25% of his monthly gross salary subject to a maximum of S\$600 p.m., and the University contributes 25% of his monthly gross salary. The total sum standing to the staff member's credit in the Fund may be withdrawn when the staff member leaves Singapore/Malaysia permanently. Other benefits include: a sitting-in allowance of S\$1,000 or S\$2,000, subsidised housing at rentals ranging from S\$100 to S\$216 p.m., education allowance in respect of children's education subject to a maximum of S\$12,000 p.a., passage assistance, and baggage allowance for the transportation of personal effects to Singapore. Application forms and further details on terms and conditions of service may be obtained from:

Mr R. E. Sharma (Director) NUS Overseas Office 6 Cheong Chuan Street, Singapore 0511, Republic of Singapore. Director of Personnel National University of Singapore, Kent Ridge, Singapore 0511, Republic of Singapore.

UNIVERSITY OF CAPE TOWN

Senior Lectureship in Classics

Applications are invited for the above post, which will be vacant from 1 January 1983. The appointment will be made according to qualifications and experience on the salary scale R15 517 - R24 045 x 532 per annum, in addition a service bonus of nearly one month's salary is payable annually.

Special qualifications and/or interest in Greek and Roman History, Archaeology and/or Philosophy will be a recommendation. Staff benefits include 75% rebate on tuition fees for dependants up to UO1, generous research leave privileges, a housing subsidy subject to government regulations, pension fund, medical aid and group life assurance.

Applicants should submit a curriculum vitae, stating present salary, teaching and other relevant experience, research interests and the publications, with available if appointed, and the names and addresses of three referees.

Further information may be obtained either from Miss J Lloyd, SA University Officer, Chichester House, 778 High Road, London WC2E 7HE or from the Registrar (Admissions: Appointments Office) University of Cape Town, Rondebosch, 7700, South Africa, by whom applications (quoting ref no E265) must be received not later than 15 October 1982.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

SEX DISCRIMINATION ACT, 1976

No job advertisement which indicates or can reasonably be interpreted as indicating an intention to discriminate on ground of sex (eg by inviting applications only from males or only from females) may be accepted, unless:

- 1. The job is for the purpose of a private household or
- 2. It is a business employing fewer than six persons or
- 3. It is otherwise exempted from the requirements of the Sex Discrimination Act.

A statement must be made at the time the advertisement is placed saying which of the exceptions in the Act is considered to apply. In addition to employment, the principal areas covered by the section of the Act which deals with advertisements are education, the supply of goods and services and the sale or letting of property.

It is the responsibility of advertisers to ensure that advertisement content does not discriminate under the terms of the Sex Discrimination Act.

Don's diary

Thursday

Arrival in Melbourne at 9.30am after a 29-hour flight from the UK is much appreciated especially after a three hour delay when the airport authorities in Bombay refused to refuel our plane. This entails an unscheduled stop at Singapore and a diversion away from the Jakarta area where a volcanic ash cloud had caused the same British Airways Jumbo to lose power on all four engines the previous week. I am met at the airport by Alan Bundy my host whilst in Melbourne, who suggests that the effects of jetlag are best counteracted by a burst of activity so we head for the Dandenong ranges north of Melbourne and drive as far as the snowline. The Victorian countryside here is richly forested and the huge blue-grey eucalyptus trees contrast oddly against the snow lending an air of uncannily to the Australian winter landscape.

Friday

I attend the seminar on "College amalgamations and libraries" which is my main reason for being in Australia. The opening address is given by Dr Graham Allen, chairman of the Victorian Post-Secondary Education Commission who underlines the factors which have brought about the present widespread amalgamations of various colleges within the different states and how the education system generally will have to adapt to the changing demands of the workplace to a far greater degree. My own contribution labelled as the "keynote address" consists largely of an account of the process of merging institutions in the UK and in particular of the academic and other related factors which had to be considered when planning the integration of learning resources at different levels. The following sessions consist of accounts of the projected college amalgamations in each state and I am struck by the close similarities to the situation in Britain. Following the rapid expansion of tertiary education in the late 1960s and early 1970s, the present constraints and structures have come as a profound shock to Australian educationalists and many are left questioning the whole rationale underlying the current round of cutbacks in this sector.

Saturday

The weekend is spent relaxing and seeing something of the countryside in and around Melbourne. On Saturday we visit the William Ricketts sanctuary situated in the lush vegetation of the Dandenong ranges. Here the sculptor's art is superbly exhibited in a rain forest setting. Ricketts has attempted to convey something of Aboriginal mythology and its links with the past in a sculptural form which he describes as "reverence for life" and the total effect of the integration of such enduring themes with the natural environment is deeply moving.

Sunday

Melbourne with its famous botanical gardens and extensive parkland is a most impressive city. Apart from its superb museums and art galleries it is almost unique in having retained a tram system. Its very wide streets and many warehouse type blocks are somewhat reminiscent of Chicago and they developed in a somewhat similar fashion. Chicago, because of the midwest cattle boom and Melbourne, due to the gold discoveries in its hinterland. My whole experience of the city is enhanced by a drive around with Chris Awcock the Librarian of Toorak College who points out the suburbs and their characteristics.

Monday

I participate in a seminar with a group of librarians from the western region of Melbourne. Given a choice between an account of library co-operation in the UK or readings from Anglo Welsh literature they opt for the latter and I find myself giving recitals of Dylan and R. S. Thomas. I must confess I find the response and the repeated requests for further readings curiously satisfying and infinitely preferable to library co-operation. In the evening I am entertained to dinner at a good French restaurant and am informed that Melbourne is internationally acknowledged for its cosmopolitan cuisine.

Tuesday

I address the students and staff of the library school at Monash University on "developments in user education". By this time word of the poetry reading has got around and I am persuaded to give further readings. It transpires that the head of the school, Professor Jean White is an English literature scholar and she informs me of a number of contemporary Australian poets who I shall look up when I get back home. This is a small but very high-powered postgraduate school which reminds me in many respects of the department of information studies at the University of Sheffield.

Wednesday

I visit Footscray Institute of Technology which is small by Australian standards but has a wide range of courses geared to the needs of the community. The campus is on a hillside overlooking Flemington racecourse and I am told that when the Royal Melbourne cup is run the colour closes down, presumably with the rest of the city. Have lunch with the principal and deputy principal and discuss, among other topics, the problem of a worldwide decline in industrial demand and its effects on the resource rich Australian economy.

The Library at Footscray is impressive, with a number of computerized data-bases and national clearing houses for specific subject areas having been recently established. One such national database has been created for recreation sport and leisure, an area which has tremendous growth potential with Australia. I admire the drive and entrepreneurial qualities which have prompted Alan Bundy the chief librarian to engage in such activities as well as the enthusiasm and dedication of his staff.

Thursday

My final official visit to the Royal Melbourne Institute of Technology. Of all the institutions visited this is the one which most closely approximates to my own polytechnic with roughly the same student numbers (8,000 FTE) and a variety of courses ranging from sub-degree to post-graduate level. As yet the institution has escaped the current round of mergers although I understand there is the possibility of a link up with a neighbouring college of education. The Librarian Barry Mitchison and I discuss the problem of professional job stagnation which affects library systems in both our countries and agree to attempt a mutual exchange of staff in similar posts. Fortunately the similarity of the two institutions as well as the library establishments should make this viable given the interest on the part of individual staff. Tonight I vow to retire early ready for any early morning flight to Adelaide and a further round of amalgamation problems.

David Lewis

The author is chief librarian of Sheffield City Polytechnic.

A perceptive article about the United States and central America in the July issue of the *Atlantic Monthly*, by Robert A. Pastor, now teaching at the University of Maryland and formerly President Carter's resident expert on the Caribbean, has many implications for American education. Dr Pastor says: "The United States is becoming a Caribbean nation. The character of American society is being subtly reshaped by the most enormous influx of immigrants from a single region since the turn of the century."

Thanks to central America and Mexico, the Hispanic community in the United States has grown from nine to 15 million in one decade. There are no signs on any horizon that this tide of people will ebb in the near future. In fact, every indication is that it will increase. For the first time in history, the Caribbean nations may have as much influence on American life as the United States has had on theirs over the last century.

Illegal immigration from Mexico has already led the Supreme Court to insist that the state of Texas cannot refuse to educate children whose parents are in the state illegally. The new wave of Spanish-speaking immigrants has also provoked a national debate over "bilingual education": whether children whose parents speak a foreign language will learn more if they can begin their schooling in the language they speak at home.

In the nation's preoccupation with bilingual education, a far more serious weakness has been ignored - the silence of American universities on Caribbean and Latin American affairs, and a national academic preference for looking East-West rather than North-South. So ingrained is this habit that at a recent meeting, the director of a prestigious institute devoted to international affairs laughed off the Latin American reaction to America's support of the British claim in the Falklands as something that simply "does not matter."

If this is the attitude of its leading intellectual institutions, there is small wonder that the nation does not think clearly about bilingual education, adapt itself to its own "Caribbeanization", or approach the problems new waves of immigrants face with either sympathy or understanding. In short, our universities have

Blinkered from the deeper South



Timothy Healy

ill-prepared us to cope with the new chain of relations being forged between the United States and the Caribbean nations.

It seems to me that there are four obligations which will rest heavily on our colleges and universities. The first is to promote the Spanish and Portuguese languages as the essential tools for entering into serious contact with the continent to the south of us.

Our national ignorance of languages and our carelessness about the cultures of countries we seek to influence is a subject for an article in itself, but nowhere is it more costly to us than in our national ignorance of Spanish and Portuguese and the cultures of our southern neighbours.

A second imperative is to teach history as it affects the New World. The pilgrims were not the only colonists. Indeed, between the Roman and the British empires, there came one which was larger than both, just as lasting in its impact, and right now, far more important to the United States, we must bring our students to understand, for instance, "Latin America", or "Asia" as applied to anything other than continents.

If we can enter into a time of intercultural teaching and learning

about the Caribbean and South America, college and university faculties will almost automatically come to a more critical and objective stand toward American foreign policies in the area. The all or nothing approach which enabled us to drive governments like Nicaragua further and further leftward, our national insensitivity to the fact that halting immigration would merely increase political instability in the Caribbean, the repulsive degrees of "repression" by which we have chosen to do out our aid to the nations of the region, all cry out for serious academic analysis and comment.

North American universities have in their keep the data for studies which could shape our national policy, the demographic projections and analyses, and the daily experience of what is happening in great immigrant cities like Miami, New York, Washington, and Los Angeles. Academics have made, however, very little concerted effort to translate their knowledge into that kind of integrative understanding and steady criticism that can influence foreign policy.

Truly intercultural education involves the imagination as well. The United States is a bundle of immigrant strands, a gathering of nations. Each has strengthened and enriched our national experience and all have given us subjects for laughter as well as tears, for learning as well as growth.

For decades, America denied that there was a black view of our cities, our history, and our national experience. The colleges and universities of the nation did very little to break through this barrier, and it is significant that the legal case which finally launched reform dealt with primary not higher education.

It would be a great shame if these United States continued to ignore the imaginative gifts its Spanish-speaking immigrants bear with them; a great language, a dozen different cultures, and a historic experience other than our own. Our East-West view is probably too strongly established ever to be lost. Nothing, however, should prevent universities and colleges in the United States from striving to turn at least some of their own and their students' attention to the North-South axis along which so much of this nation's future is likely to run.

Credentials keep vatman from robbing

credentials. So I shall take unbundling seriously. But first a word about the conference. It was a joint production of North-East London Polytechnic and the Manpower Services Commission, to bring together community educators from both sides of the Atlantic. This turned out to be community college presidents, for the most part from New England, and some further education folk from old England. There were no representatives from the well established English secondary tradition of community education. If there had been we'd have talked less about credentials. But we did have Mr Peter Haxby from the MSC, who told us he was trying to get mini certificates for his courses. So there's a bit of unbundling starting in the UK also.

Christopher Price

I have just returned from an educational conference in the USA, and can inform readers of *THE TIMES* that the "in" word for 1983 will be "unbundling". It's all about breaking courses down into their constituent parts and giving students a number of mini credentials rather than just one big one. The conference - at West Point in New York State - was held for a decade now, just as the City and Guilds is holding up the flag, or like the universities. For a decade, also they've resisted infection by the Open University's credit system. So who will help the student who wants to take little mouthfuls towards a larger qualification? It ought to be the Department of Education and Science, bringing the great credentialing gangsters into line. But to do so, over to the Department of Employment Mr Haxby told us of

his valiant efforts to turn the new training courses for 16 to 19 year olds, into credit-transferable, certified courses, which would lead young people back into the education system. The City and Guilds is proving difficult at the moment; but I got the impression that the MSC would get its way. Even if the universities continue to resist a credit system, something of the kind may develop in further education.

Unbundling has so far been associated with negotiations between colleges and industry, identifying small "skill packages" which employers find useful, but which can also be part of a longer course. It is a move to make courses more relevant to students and employers and less dependent on academic tradition. But it is very small beer compared with the massive negative unbundling of community college courses by the politicians and the education authorities - making cuts by refusing to fund certain subjects.

In California archery is now ineligible for funding, while table tennis remains acceptable. The same process is discernible in the UK, with VATmen sniffing round, or eyeing classes, trying to draw a questionable distinction between "proper education" and "taxable recreation". The present VAT ground rules seem to be these: the smaller the public subsidy and the bigger the tuition fee, the more likely it is to be "recreation" and what "recreation" and what "education" is a recognized credential or certificate at the end of the course. (Education is serious, recreation is fun.) So, though I predict it without enthusiasm, it looks as though we'll have more and more credentials in the 1980s as an encouragement to the student to keep going in small steps, a guarantee to the employer that he's getting the skills he wants; and an indication to the VATman that this is serious stuff and he should keep his sticky fingers off it.

LETTERS TO THE EDITOR

Errors of analysis in social science

Sir - After your first article on British education, past, present, and future, may I suggest that those of us who have been active in this domain recent decades should admit our part in its inadequacy? A gamut of our institutions from Parliament to the unions have been rightly found culpable, but equally education cannot escape stricture: it has failed to teach the nation how to earn its living. It has promoted the divorce between pure knowledge and useful knowledge to the extent that the ultimate enforced recognition that the desirable things in life, such as universities, concert-halls, and libraries, are based as surely on the products of factories as flowers are on well-manured soil, has been and is traumatic. Belatedly we now have to return to the teaching of Matthew Arnold. More specifically, there has been a signal failure in analysis in that

branch of learning that purports to describe society, namely, social science. It would be easy to draw up a syllabus of errors. I will point to merely three. First, Keynesian economists failed to recognize that any general theory of the macro-economy is dependent on a comparative stability of certain parameters. The Keynesian system collapsed from its own inner contradictions. At a late stage Professor Thirlwall, a leading Keynesian, admitted that there is a "perversity" in the system. Others have not been so honest. Second, influential sociologists failed, one can only say pigheadedly, to recognize the growing power of the unions, which enabled them to force up money wages at twice the rate of our competitors. One of the most eminent of them, Runciman, writing in 1967 uncritically accepted

the distribution of industrial power identified by Cole in 1939. It has taken the *force majeure* of three million unemployed to break a power that was invisible to sociologists for two decades. Third, political scientists with a few exceptions failed to identify the decay of the Labour Party, government "over-load", and the growing dysfunction of the two-party system in the presence of a measured decline removed the scales from their eyes. In crude terms many scholars in the social sciences forgot that what goes up must come down. Assertions about intellectual brilliance in Britain must be subject to reservations.

Yours sincerely, KEN BURGIN, 21 Hawthorns, Woodford Green, Essex.

Robert Graves

Sir - I am writing to you on Mr Andrew Motion's review article "Goodbye to all that?" (*THEES*, May 21), with special reference to his treating of the subject of myself on the basis of the reading of an actually reluctant recognition, from the author, Martin Seymour-Smith's *Robert Graves: His Life and Work*.

The second, a selection from the letters of Robert Graves of 32 years, edited by Paul O'Prey, is criticizable as source-material for treating of the subject of myself because it leans to a large extent (though not entirely) on the content of these letters, which is to say what accorded with Graves's general policy, at the time of the writing of each, of adaptation of fact to his sense of the advantageous to himself in what a letter conveyed in representation of fact, and impressively of elaborate invention in a letter-report of circumstances, for a desired and calculated effect.

But Mr Seymour-Smith's book has priority of concern for me, immediately, because of the wholesale quantity of denigratory terms and defamatory allegations, depictions, gathered in by him from quarters affected by Graves's later overt acts and verbal deeds of hostility towards me, and from Graves directly, and from the far-and-wide of the literary-world special breed of humnally petty animus puffed up into pseudo-scholarly respectability by its mere deference-making to a name of literary-world identity-colour.

Mr Motion has followed the rule of convenience and sentiment in their accepting the Seymour-Smith wrap-up of the subject of myself in the wrappings of his dealing with the Robert Graves subject. The convenience of this is obvious: what seems to be a lot of work on the subject has been done, and there is no particular sentiment in current men-of-literary-letters prompting sentiment energetically counter to the assaults, insinuations, implications, directed at me by Seymour-Smith, (practised guide-to-world-literature wielder of weaponry in the greatest name of biographical-critical-report).

question as to "unsuitable" women, in the case of the life and work of Robert Graves. The fact of Graves's militant hanging-on to an actually arbitrary, self-willed, identification of himself as poet-by-gift-of-nature has been an actually reluctant recognition, from the author, Martin Seymour-Smith's *Robert Graves: His Life and Work*.

The second, a selection from the letters of Robert Graves of 32 years, edited by Paul O'Prey, is criticizable as source-material for treating of the subject of myself because it leans to a large extent (though not entirely) on the content of these letters, which is to say what accorded with Graves's general policy, at the time of the writing of each, of adaptation of fact to his sense of the advantageous to himself in what a letter conveyed in representation of fact, and impressively of elaborate invention in a letter-report of circumstances, for a desired and calculated effect.

But Mr Seymour-Smith's book has priority of concern for me, immediately, because of the wholesale quantity of denigratory terms and defamatory allegations, depictions, gathered in by him from quarters affected by Graves's later overt acts and verbal deeds of hostility towards me, and from Graves directly, and from the far-and-wide of the literary-world special breed of humnally petty animus puffed up into pseudo-scholarly respectability by its mere deference-making to a name of literary-world identity-colour.

Mr Motion, as other writers generally on Martin Seymour-Smith's book, has deemed himself a suitable man to deal with its author as a whole, a suitable man for author of it, and Graves as a suitable man to have attempted the raiding of pre-Georgian, then Georgian, then post-Georgian, and post on-and-on possibilities of proving himself somehow or other important as a poet.

This marianal prepossession of Graves has cornered the literary world at last into some sort of surrender to it, and emancipated the intellectual vigour of men in it, suitable for challenging the enormities of prevarication as to myself, committed by a suitable man for author of it, and Graves as a suitable man to have attempted the raiding of pre-Georgian, then Georgian, then post-Georgian, and post on-and-on possibilities of proving himself somehow or other important as a poet.

The case of Mr Motion's performance as a deliverer of the lies about myself and Nancy Nicholson assembled in the Seymour-Smith book as truth about Robert Graves is hopeless. But there exists a public for all published material; and, while the case of the public contains much in it of the hopeless, there is an unknown in it that moves me to set down

Laura (Riding) Jackson, Box 35 Wabasso, Florida, 32970.

Quality control

Sir - Professor Donald Watt ("The hard sell", *THEES*, August 20) has not looked very far into the media used by universities to advertise their wares. The three films he mentions are certainly not the first, nor is any of my view the best. But I am most worried about his comment, "The condition is for quality not quantity of applicants is increased we can choose more good students". Yours sincerely, TED BELL, University of Reading

Student creativity

Sir - Recently I went to see the work produced by a certain polytechnic students for their degree shows. In the textile show I was impressed with the diversity of materials and processes. I was most interested in the work that broke out of the boundaries, which traditionally circumscribe art school courses such as textile design. However, there was a predictable side to the show; highly competent and commercially viable designs for coverings and garments, which only reinforced a status quo.

break down barriers between various disciplines. The work of at least two students displayed a vital tension between very personal creative processes and images of great accessibility. It astounded me that one of these students was failed by the "examiners". My main concern is with the injustices that do arise because of the application of blanket standards for assessment purposes. It is very worrying that two students whose work has no common point of contact, can be assessed under the same criteria. I only hope that students will remain vigilant, aware of the subtle constraints sometimes implemented by certain practical tutors. Yours faithfully, NEIL PATTERSON, 22 Butler Avenue, West Harrow.

Unemployment benefits

Sir - I have recently been employed as a part-time lecturer at Huddersfield Polytechnic and I would like to inform you, and any of your readers in a similar situation to myself, about a dispute I have recently had with the Department of Employment. In common with most part-time lecturers I am employed on a contract which is for the duration of one term only. There is no guarantee of work in subsequent terms and no holiday payment. The money earned from this contract is subject to taxation and national insurance deductions in the normal manner. This year, during the polytechnic students' holiday at Easter, when I was between contracts, I registered myself as available for work at the local job centre and put in a claim for unemployment benefit. Some two months later I was informed by a national insurance officer that I was disqualified from receiving benefit on the grounds that I was on a "customary holiday". The unemployment sickness and invalidity benefit regulations (available from your local reference library) define a "customary holiday" as days which the employer and employee have agreed will be non-working days. The above regulations also state that a person is not on a customary holiday if the following conditions apply to his or her employment:

- (a) Any contract between employer and employee has terminated.
- (b) There is no intention of renewing the employment at the first available opportunity.

I appealed against the insurance officer's decision, to the local tribunal, on the following grounds. Condition (a) above was satisfied by my employment with the polytechnic as my contract had terminated at the end of the spring term. Condition (b) was also satisfied as the full-time academic staff were employed during the students' holiday, doing work similar to that which I did during term time eg setting exams, marking, course development. I therefore argued that my actual date of re-employment with the polytechnic, the beginning of the summer term, was not the first available opportunity for renewal of my contract as the polytechnic could have employed me throughout the Easter period.

This appeal was allowed by the local tribunal, for the reasons given above. The students are now on their summer holidays, I am between contracts again but I am now getting my unemployment benefit. Yours faithfully, ANDREW KING, 24 North Road, Kirkburton, Huddersfield, Yorks

Overseas academics

Sir - Dr Burridge and others profess to be "appalled" at the Home Office's guidelines restricting the appointment of overseas academics in British universities. Perhaps they should also consider that in France, Germany and (to a slightly lesser extent) Italy, it has for years been standard practice to appoint only nationals to academic posts to the exclusion even of citizens of other EEC countries (teachers of English are, for obvious reasons, exempted). Thus British academics are all too often caught between the hammer of Government cuts in this country and the anvil of restrictive appointment practices in other countries.

I do not often find myself in sympathy with our present government, but unless other countries, particularly EEC countries, are prepared to lift their restrictions, our government should not be criticized too indiscriminately merely because it has adopted a similar stance. Academics, instead of overreacting to the recent guidelines, should be urging the Government to adopt a generous policy towards those countries who freely appoint non-nationals to academic posts and put pressure on those countries which persist in their restrictive practices. Reciprocity is surely the prime consideration. Yours faithfully, JAMES CHARTER, 3 Iverna Gardens, London W8

Opening the door on entry to university

The Labour Party's National Executive Committee's working group on education published its comments on higher education at the same time as this year's A level results were published.

This widely publicized report advocating much wider criteria for entry into higher education, particularly the universities, will find a sympathetic response among the large number of young people whose A level results have not been good enough to secure them a place in the university of their choice.

Once again is raised the question of university entry qualifications and whether A level results should be the main measure of this. Many argue that since there is to be a selection because the applications for university places outnumber the vacancies available, A levels are about as good a system as any alternative.

It is pointed out that in suitable cases the A level formal qualifications can be waived and that there is a growing tendency to make exceptions in the case of mature students. However, no one will deny that these latter groups represent a minority of applicants.

The opponents of the A level criteria argue basically two things; first they say that it is



wrong that a person's whole future should be determined by "death or glory" effort on one particular day; that the rigid grading system of results is inaccurate and inflexible.

In a wider sense the gearing of school systems of O and A level examinations inhibits the development of the education in the schools towards the wider approach of subject teaching and a curriculum that meets the real needs of young people.

Both of these opposing arguments have merit and bright ideas constantly flow from many educational theorists in attempts to resolve the dilemma.

I would be the last to pretend that there is some facile solution to the problems raised. Indeed, with the further restrictions imposed by the Government on university places and restrictions that are due to take place on an ever increasing scale in the polytechnics are tying us into an even tighter straitjacket.

With hindsight we might have tackled the problems during the short-lived period of expansion in the 1960s. It is certainly more difficult to do so today and will continue to be difficult until such time occurs when the universities cease to be a plighting of the politicians.

We can only attempt to hold the door open to give opportunities to the mature students without formal qualifications and to that small group who are admitted on a basis other than their A level results. When the restrictions are removed and when we can foresee a reasonably stable future for the universities, then we can tackle the problems raised by the Labour Party's working group in a sensible and reasonable way.

Laurie Sapper

The author is general secretary of the Association of University Teachers.